ACHSD Data Book: Investigating Maine's Health Care Cost Drivers

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LD 1849 requires that the ACHSD conduct a systemic review of cost drivers in the State's health care system, collect and report on health care cost indicators, identify specific potential reductions in total health care spending, and make specific recommendations to the legislature beginning March 1, 2008 and annually thereafter, with the goal of reducing the rate of increase in overall health care spending and the rate of increase in health care costs to a level that is equivalent to the rate of increase in the cost of living to make health care and health coverage more affordable for people in this State.

The purpose of this book is to assist in meeting those legislative requirements. The table of contents cross walks which page of this document provides the info for each data element required by LD 1849.

EXECUTIVE SUMMARY

Investigating Maine's Health Care Cost Drivers

Overview: US Spends More, Gets Less

- The US spends almost twice as much per person on health care as other industrialized nations[2], but fails to cover everyone and "… does not deliver objectively better quality and access for US citizens as a whole relative to peer countries."[2]
- The US could save $477 billion/year if we addressed these variations:[3]

Excess Capacity

- US has and uses fewer in-patient beds than peer nations but our cost per bed is over 4 times their cost and we have over-capacity.
- We do more in-patient surgery but with no better outcomes.
- We have an oversupply of technology (e.g.: we have 3-6 times more scanners than Germany).
- 30%-40% of diagnostic imaging is inappropriate or non-contributory; this excess capacity alone translates to some $40 billion additional cost to the US health care system.

Service Costs

- Physicians in the US see more patients than do doctors in other countries and are paid better. We have the same distribution of generalists to specialists and the cost and length of medical education is comparable in all countries.
- The US spends more on nursing largely due to how nurses are employed and used in the US, not salary differences.
- Administrative costs account for $94 billion more spending than other countries.

Utilization

- The US uses 20% fewer prescription drugs than those in peer nations but the price is 60% higher.
- While the US is slightly "sicker", only 3% of additional spending is explained by higher disease burden.
- The US spends twice what peer nations do on public health but the bulk of that spending is not on prevention.

In short, other nations are doing as well or better than the US in achieving health through quality systems and covering all their citizens at a cost that translates to $477 billion less than what we spend.

New England Spends More than US

- New England states spend more per person ($6409) than the US average ($5283). Per person spending in Maine ($6540) was the 2nd highest in the US, for a total of $8.6 billion in 2004.
- As is the case nationally – hospital services, physician and clinical services, and prescription drugs, account for about 75% of all health care spending in Maine[4]. 85% of private premiums pay for medical care, while 11% goes to administration and 4% to insurance company profit.[5]
- Maine had the fourth highest average annual percent increase in health care spending from 1999-2004: 9.7%, versus a national average of 7.4%.

Causes of Higher Medical Spending

- 25% of higher spending is due to higher prices, 75% is from more utilization.

What We Pay for Services Varies

- Prices differ because: (1) less efficient providers charge a higher price to cover higher expenses; and (2) costs shift from uncompensated care and, in some cases, from public payors' paying less than cost to provide payers.
- Many Maine hospitals spend 20%-60% more to treat the same patient than Maine peer hospitals.[6]
- Data on the extent of cost shift from Medicare and Medicaid is not available.
- Statewide uncompensated care has decreased since the late 1990s: from 5% of charges ($120 million out of $2.4 billion in total business) in 1999 to 3.8% of charges ($183 million out of $4.9 billion in total business) in 2005. This reflects Maine's success in covering the uninsured.

How We Use Services Varies

- In most respects, Maine's hospital utilization mirrors the nations: inpatient utilization has been relatively flat, but there has been an increase in outpatient.
- Maine's increase in outpatient utilization – has been much steeper than the nation's.
- Maine's emergency department use is much higher than the nation's.
- According to the Maine Quality Forum medical practice often varies by community. Similar patients in different towns receive different care, even if there are no differences in health.
  - This variation can result in unnecessary spending – unnecessary because it does not make patients healthier – and may expose patients to unnecessary risks.

[1]Thorpe in Health Affairs 10/2/07 citing OECD data
[2]McKinsey Global Institute. "Accounting for the Cost of Health Care in the United States." January 2007.
[3]*Ibid.*
[4]CMS Office of the Actuary.
[5]Insurance companies' 2006 945 filings with Maine Bureau of Insurance. Administration includes such things as marketing,
state taxes, claims processing, and negotiations with providers. Profit reported is before federal income taxes and does not include insurance companies' income from investments.
[6]Schramm-Raleigh Analysis of Hospitals' Medicare Cost Report Data, Following Maine Hospital Assoc. Methodology.

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A Summary of the McKinsey Global Institute's "Accounting for the Cost of Health Care in the United States"

The McKinsey Global Institute (MGI) is the economics research arm of the global management consulting firm McKinsey and Company. MGI's web-site states that "MGI investigations are conducted with the goal of improving business performance and competitiveness while establishing a fact base for sound policymaking."

In the report, MGI writes that "Our hope is that our fact base, this framework, and these potential actions serve as a constructive starting point for enabling positive health system reform that promotes quality and access sustainably while ensuring ongoing innovation and US economic growth."

MGI Basic Finding: US Spends 41% More Per Capita than Expected Based on Our Wealth

- MGI uses a sample of 13 Organization for Economic Co-operation and Development (OECD)[1] countries to develop a measure -- Estimated Spending According to Wealth (ESAW) -- that adjusts health care spending according to GDP per capita, since countries spend more on health care (or any service) as their wealth increases.

- The US's per capita health care spending in 2003 was $5,635. This is $1,645 per capita -- 41% -- more than ESAW (the amount we'd be expected to spend based on our income), for a total of $477 billion in spending beyond expected. That is 48% higher than Norway, the country with the next highest health spending per capita, and more than twice the OECD average of $2,572.

- MGI found that "Despite higher costs, the United States does not deliver objectively better quality and access for US citizens as a whole relative to peer countries."

MGI analyses the causes of the US's higher spending in effort to inform "empirically grounded debate about all aspects of the US health care system that will lead to sound reform, delivering better management of costs while improving care quality and patient access."

There is no single cause, or cure. Rather, "the overriding cause of high US health care costs is the failure of the intermediation system to

(a) "establish the necessary incentives or mandates to promote rational supply by providers and other suppliers" and

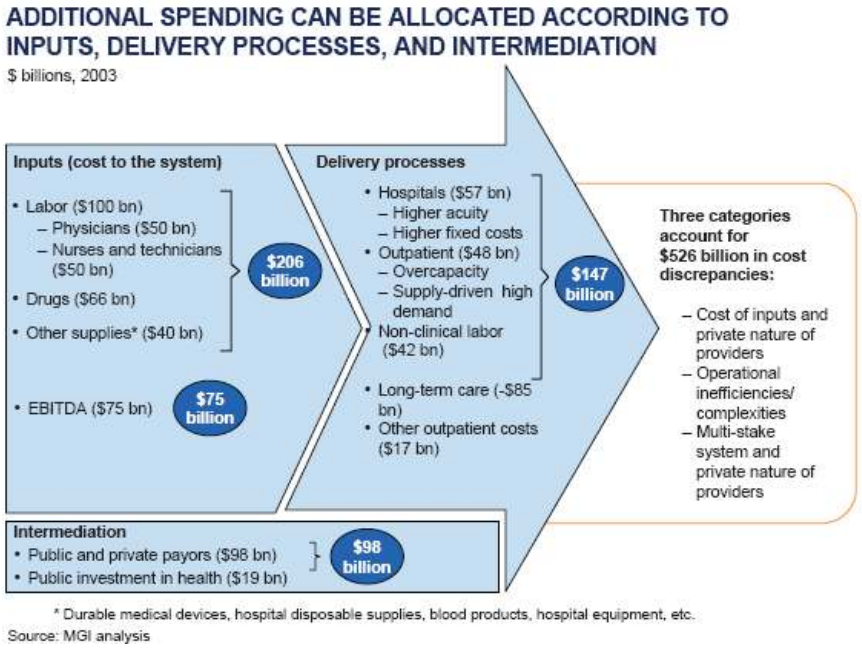
(b) "provide sufficient incentives to patients and consumers to be value-conscious in their demand decisions."

"There are, currently, no fully reliable mechanisms to drive down input prices or to stem the United States' very high use of consultations and outpatient testing and imaging—some of which is potentially unnecessary. Moreover, the system incurs a range of costs not borne in other countries, which are unique to the US system with its significant for-profit element and its multiple-state and multiple-payor administrative structure."

While only a small portion of additional US spending is explained by a higher disease burden,

> "the high prevalence of some conditions in the United States (e.g., heart conditions, diabetes, and select types of cancer) indicates that prevention programs targeted at reducing the prevalence of disease, particularly diseases with high treatment costs, would offer very substantial opportunities for better health and lower cost."

The graphic below provides a snapshot of how MGI explains the US's spending above ESAW. The table below that shows MGI's breakout by category of how much US spending exceeds expected spending. On the pages following the table is a summary of MGI's explanation of why spending in each category is different from expected. The last three pages excerpt McKinsey's conclusion - "Why and How To Pursue Health Care Reform In The United States" - including McKinsey's seven guiding principles for reform.



EBITDA stands for Earnings before Interest, Taxes, Depreciation, and Amortization.

US Spending Above "Estimated Spending According to Wealth" (ESAW)

	$ above ESAW	% of "overspending" attributable to this category	% above ESAW for this category
Hospital	$224 bil	47%	66%
Outpatient	$178 bil	37%	57%
Insurance and Administration	$98 bil	21%	445%
Prescription Drugs	$57 bil	12%	37%
Public Investment in Health	$19 bil	4%	17%
Long Term Care	($85 bil)	(18%)	(36%)
Durable Medical Equipment	($14 bil)	(3%)	(41%)
Total	**$477 bil**	**100%**	**41%**

Explanation of columns: First column gives the total amount by which this category is over expected spending. Second column shows the percentage of the total US "overspending" that is attributable to

each category (e.g., prescription drugs account for 12% of US spending above ESAW). Third column shows how much US actual spending on this category differs from expected spending (e.g., the US spends 37% more than ESAW on prescription drugs).

MGI Analysis Of Why Spending In Each Category Is Different From Expected

Hospital and Outpatient spending account for 47% and 37%, respectively, of total spending above ESAW. Reasons are summarized/quoted below.

Differences in Hospital Use

- The US uses fewer days per 1000, but our cost per bed day is 4.3x OECD, resulting in US spending 2.6X more per capita on hospital care than OECD countries.
- The US does more inpatient surgery: 88 per 1000 vs OECD 75 per 1000, but with no better outcomes; e.g., "coronary heart disease is the #1 cause of mortality in US & UK. In both countries, the most common surgical treatments for coronary heart disease are coronary bypass and angioplasty. Yet…these procedures are performed more than four times as frequently in the US…[but] these additional procedures do not translate into favorable survival rates."

Migration from Inpatient to Outpatient Setting

- "In recent years, outpatient procedures (such as colonoscopies, MRIs, CT scans, and other laboratory tests) have increasingly been moved out of hospitals into ASCs [Ambulatory Surgical Centers], DICs [Diagnostic Imaging Centers], and diagnostic testing and procedure centers. Simpler cases have moved out of hospitals into physicians' offices."
- Less expensive services have migrated to outpatient setting, resulting in:
    - Hospitals being left with higher casemix = higher cost
    - Overcapacity: while the US has fewer beds per thousand than OECD, US occupancy is 50-60% vs 60-70% in OECD countries, resulting in US spreading cost of more overhead over fewer patients.

The Reimbursement System's Effect on Capacity and Utilization

- "The current reimbursement structure provides an incentive for using expensive medical technologies. This creates an oversupply of such technologies and…this increases demand, leading to a self-perpetuating cycle of consumption."
- "The high profitability of…outpatient centers has driven investors and physicians to fund a rapid expansion in the number of these facilities, which has resulted in…redundancy in capacity. For example, in a hospital, a CT scanner will perform approximately 20 to 30 scans in a day; in a DIC, this same equipment will complete many less, since they tend to be open for fewer hours a day and the breakeven number of scans can be as low as four to eight scans a day. Yet, these scanners still require largely the same staff and maintenance as in a hospital setting."
- "The fee-for-service reimbursement system creates an incentive for physicians to see more patients. This is magnified by physician co-ownership of…facilities, which offers a strong incentive to self-refer cases— physicians who own imaging equipment refer between two and eight times more tests than their peers without equity interest. Furthermore, manufacturers of imaging and diagnostic equipment advertise to physicians the financial advantages of pursuing additional testing. Ultimately, the excess installed capacity (the US has three to six times more scanners than Germany, UK, France and Canada) with low utilization further increases the pressure to generate more de-

mand in order to justify the investments made. The vicious circle is not easily interrupted by a reduction of reimbursement fees, since revenue levels can be maintained through incremental demand fueled by clinical discretion."

- "Given the direct correlation between CT and MRI scanners and the volume of the procedures they perform…we conclude that excess capacity translates into some $40 billion of additional cost to the US health care system. It is projected that, in 2006, one out of every four US citizens will receive a CT scan…A National Imaging Association audit concluded that 30 to 40% of diagnostic imaging is inappropriate or noncontributory."
- "Similar incentives are also in play for laboratory and diagnostic testing, distorting underlying demand for such services and negatively affecting the value consciousness of doctors and their patients… Physicians usually profit from the operating margins of these tests—and this creates an incentive to use the tests when evidence-based indications are not clear. As for patients, they find co-located diagnostics convenient and reassuring and, because they incur very low out-of-pocket expenses, they are not motivated to question the incremental value of additional tests. Most patients operate with the mind-set that more testing is reassuring."

Physicians and Other Compensation

- $50 billion of US spending above ESAW is attributable to physician compensation, while another $50 billion is attributable to nurses and technicians.
- OECD "Physicians' compensation is, on average, 4 times GDP per capita for specialists and 3.2 times for generalists. In the US, these figures rise to 6.6 and 4.2, respectively….The fee-for-service format creates incentives to see more patients than other formats would—especially since subjective clinical judgment guides treatment intervals and consultations in most cases. Not surprisingly, then, physicians in the US see, on average, 1.6 times more patients than do physicians in other countries"
- McKinsey responds as follows to two commonly cited justifications for higher physician salaries in the US:
    - ratio of specialist to generalists: "we have found that contrary to common belief, the US has the same distribution of generalists and specialists as other OECD countries—64 percent to 36 percent"
    - the cost and length of medical education: "Similarly not convincing is the second argument because other US professionals undergo the same length of training and investment but are not as well compensated."
- Additional spending on nurses' labor "comes less from nurse salaries and more from the manner in which nurses are employed and utilized in the United States," that "is largely the result of three factors.
    - "higher inpatient acuity necessitating more nursing care.
    - "a combination of regulation and accreditation rules put in place under the presumption that a greater number of nurses improve quality of care.
    - "a staffing system that favors highly trained nurses doing lower value-added jobs (less delegation)."
- The US also has higher costs related to miscellaneous staff and support functions.

Insurance and Administration spending accounts for 21% of total spending above ESAW, as shown in the following the table. These amounts are also included in the service areas in Table 1:

	$ above ESAW	% of US "overspending" attributable to this category
admin from underwriting, sales, marketing	$54 bil	11%
other admin from private multi-payor, multi-state regs	$30 bil	6%
admin from public payors	$14 bil	3%

The report states that:

- "The United States spent $412 per capita on health care administration and insurance in 2003—nearly six times as much as the OECD average.
- "This is because of its unique multiple-payor system, differences in insurance regulation across states, and the complexities of administering Medicare, Medicaid, and private-insurance products.
- "This total does not include the additional administrative burden of the multi-payor structure and insurance products on hospitals and outpatient centers, which is accounted for under providers' operational costs.
- "Nor does it include the extra costs incurred by employers because of the need for robust human resources departments to administer health care benefits
- "In the US private sector, we found that some 64 percent of the administrative costs incurred by private payors is due to underwriting health risks, and sales and marketing—costs that do not arise in the public systems of most OECD countries.
- "In the public sector, administrative expenses take up 3 percent of the Medicare budget and 3 to 5 percent of the Medicaid system, compared with 2 percent spent in Britain's National Health Service (NHS)."

Prescription Drug spending – including both prescription and over the counter drugs – accounts for $57 billion, or 12%, of total spending above ESAW. An additional $9 billion is consumed within hospitals and outpatient facilities. US patients consume approximately 20% fewer prescription drugs than OECD patients, but prices of branded products are 60% higher in the US.

Public Investment in Health is comprised of three broad categories of spending:

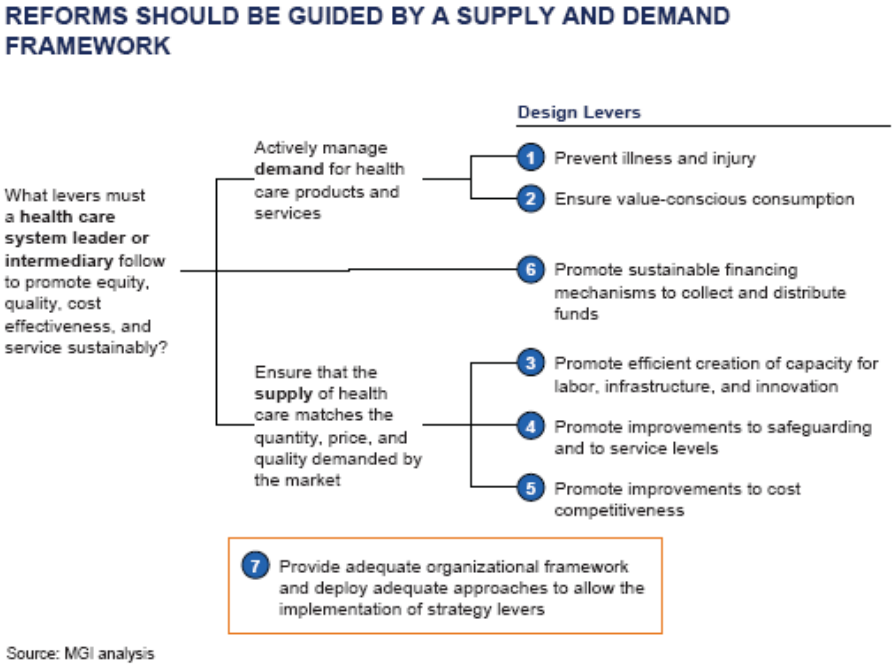
- Investments in prevention and public health. The US spends $34 billion – or almost two times – above ESAW. "Some 70 percent of the US spending is in the form of state and local government–sponsored activities to further public health, yet the bulk of it is not on prevention per se. Most of these activities involve database management, rather than targeted prevention programs that reduce demand…Most prevention in the United States, such as immunization, is paid for by insurance. US government agencies, led by the Department of Health and Human Services (DHHS), spearhead most of the larger public health programs; nevertheless, such efforts represent only about 15 percent of the total expenditure on public health activities."
- Public and nonprofit research and development efforts. The US spends $10 billion above ESAW.

"It is well known that the United States spends more than any other nation on public R&D efforts…However, it is important to mention that we do not include all the R&D investments undertaken by private companies (such as pharmaceutical and medical devices companies) in our comparison because OECD country statistics only account for public R&D investments."

- Public investment in medical facilities. The US spends $25 billion below ESAW. "Our finding that the United States spends below ESAW on investment in medical facilities…is not surprising given the large private component of the US health care system. It is expected that part of the capital expenditure in the construction of medical centers is made by the private investors that wish to operate in this market."

Long Term Care and Durable Medical Equipment spending is lower in the US than ESAW. MGI explains this is "partly explained by an accounting discrepancy—in the US, a significant amount of out-of pocket payments in those categories are not captured in the OECD method of accounting for costs. The relatively young age of the US population is a factor accounting for the rest of the difference. Age adjusting the US population to the OECD average would add $115 billion of additional spending."

MGI Conclusion:
"Why and How To Pursue Health Care Reform In The United States"



"Health care reform in the United States has received considerable attention in recent years. Commentators have suggested that the current US health care system is economically unsustainable. Our analysis shows that the high costs of US health care are spread across the system. In the public debate about how to bring costs under better control, different advocates have a variety of preferred

targets for change—whether the administrative complexity of the private system, the profitability of pharmaceutical companies the use of IT and electronic health records [38-40], consumer driven health care [41-44], or control over the use of technology [45] among others. Yet we show that most components of the US health care system are economically distorted. Among system stakeholders, there are few incentives to change the status quo, most of the stakeholders are currently benefiting. Our view is that intermediation in the provision of care has broken down and is in need of reform.

"In fact, today, well-insured patients obtain a high standard of care with low out of- pocket expenses; physicians are highly compensated professionals; nurses and other health care workers generally have high rates of employment and above-average incomes; suppliers of pharmaceuticals, medical devices, imaging equipment, laboratory supplies and equipment, and other medical equipment and services command high prices and sell large volumes; payors and providers are generally profitable; and large employers receive tax breaks to help offset insurance costs. Moreover, the health care industry is profitable, employs a large number of people, and enables patients with insurance to receive among the highest quality and most convenient health care in the world. These groups all benefit from the status quo in the US health care system.

"However, there is another side to the health care system. Currently, the uninsured (15.9 percent or 46.6 million Americans up from 15.6 percent and 45.3 million in 2004) have only emergency access to care and the underinsured, representing many small and medium-sized businesses (these entities pay handsomely for health care) are frequently paying more or receiving less access to care than peers in other countries. In addition, objective system-level data for conditions where data exists reveal that neither life expectancy nor quality is better in than US than peer health systems.

"Thus, the best arguments for changing the current health care system are to reduce the disparity in access to health care among US citizens; to reduce the tax burden on the ordinary citizen; to reduce the cost to employees; and to assure that quality and value of care is the primary driver in services provided.

"No single reform is likely to succeed in achieving the necessary rebalancing. To be effective, reform in US health care will need to apply sound principles on both the demand and the supply sides of the system. We believe that a broad framework [see graphic above] should guide reform and involve all key stakeholders in the debate and solutions. Regulators, employers, patients, physicians, providers, and payors are faced with the challenge of addressing fundamental questions, reviewing their role in the process, and participating in the debate and the solution. In the appendix we provide recommendations of how stakeholders may participate in the process.

"How Stakeholders Can Participate to Improve the US Health Care System"

"To secure changes in behavior among consumers and suppliers, health care system stakeholders have three major levers at their disposal: (i) building awareness, (ii) adjusting incentives, and (iii) imposing mandates. System stakeholder need to find a balance between the three, appropriate to the political and cultural context of their system, through negotiations with other stakeholders. It should be noted that system leaders also have the option to take direct action. In other countries, this is a frequent approach for reform. In the United States the government's management of the Veterans Administration and military health systems are examples. Below we discuss how the various system stakeholders could collaborate to create positive reform.

"Regulators. Regulators should take a broad view of health care reform in the United States and

strive to address a number of entangled issues through a combination of promoting awareness, creating financial incentives, and (if necessary) issuing mandates or taking direct action. It is important for regulators to focus on both supply and demand to reduce unintended consequences.

"Employers. As the bearers of much of the high cost of health care, employers could play a more active role in managing health care costs. This is best performed by exerting pressure on payors and benefits administrators to define and maximize value and value consciousness. Employers are perhaps best positioned to shape efforts to promote transparency and value-based reimbursement systems.

"Patients. Patients should seek to become more value-conscious, as health benefits increasingly become more consumer-directed, and take a more active role in their care and health. This involves understanding what they are being treated for, what their options are, what the costs involved with the procedures are, whether the procedures are necessary, and whether there are higher-value alternatives.

"Taking charge means monitoring and managing bills; understanding how new drugs, technologies, and devices add value; and frequently opting for generic drugs when they are available and appropriate. Patients should insist that health plans or other infomediaries emerge to help them identify high value providers and treatments efficiently.

"Additionally, patients should prepare for predictable end-of-life expenses with a greater reliance on savings rather than insurance.

"Physicians. Physicians are the key intermediary in matching supply and demand. Among the players in the health care system, physicians possess the knowledge regarding the importance/ relevance of tests, drugs, and imaging. Physicians can help tremendously by framing treatment options in terms of value (cost, quality, and convenience) for patients, becoming familiar with the relative prices of different treatment and providers, and adhering to evidence-based medicine guidelines when they are available and helping to create more evidence.

"Providers. Providers should strive to create value by improving productivity, effectively monitoring and managing operating variations, and consolidating to create efficiencies of scale when feasible. Additionally, providers can do a great deal to help patients understand trade-offs associated with treatment options and help patients define value (how to assess quality and service for various treatments and diseases).

"Providers could also innovate around reducing input prices–both capital and labor. When regulations allow, providers could experiment with different clinical labor mix and staffing patterns as well as with creating lower fixed-cost capacity.

"Payors. Payors can support system reform by designing products that favor value-conscious behavior on the part of patients and leveraging their existing data to help consumers efficiently identify high-value
providers and treatment options [46]. Additionally, extending disease management to more high-risk patients together with the creation of lower cost health insurance products represent opportunities to improve quality and access.

"Our hope is that our fact base, this framework, and these potential actions serve as a constructive starting point for enabling positive health system reform that promotes quality and access sustainably while ensuring ongoing innovation and US economic growth."

Source of Insurance Coverage

Health Insurance Coverage of the Total Population, states (2004-2005), U.S.

	Employer	Individual	Medicaid	Medicare	Other Public	Uninsured
US	54%	5%	13%	12%	1%	15%
ME	52%	4%	20%	12%	1%	10%
CT	61%	4%	11%	13%	1%	11%
MA	60%	4%	14%	12%	1%	10%
NH	67%	4%	6%	13%	1%	10%
RI	56%	4%	17%	11%	1%	11%
VT	52%	4%	19%	13%	1%	11%

Note: Dual eligibles are included under Medicaid.
Source www.statehealthfacts.kff.org accessed Sep 26 2007

Regardless of which of the 50 states you live in, the under age 65 population gets its insurance from four basic sources: employers, the individual market, the jointly federal-state funded Medicaid program, and, for the disabled, the federal Medicare program. Individuals who do not meet states' varying Medicaid eligibility criteria and who do not, for one reason or another, have access to or decide not to purchase employer or individual coverage remain uninsured. People age 65 and over are usually insured through the federal Medicare program.

The table above shows the most recent data available at KFF.org -- 2004/2005 blended data from the US Census Bureau -- on sources of coverage for the US and the six New England states. It shows that Maine is consistent with the national average in that just over half of the total population (about 60% of the under 65 population) has coverage through their employers, while 4-5% purchase coverage in the individual market. Maine is tied for the lowest uninsured rates in the country. It also has the highest rate of Medicaid enrollment, other than District of Columbia.

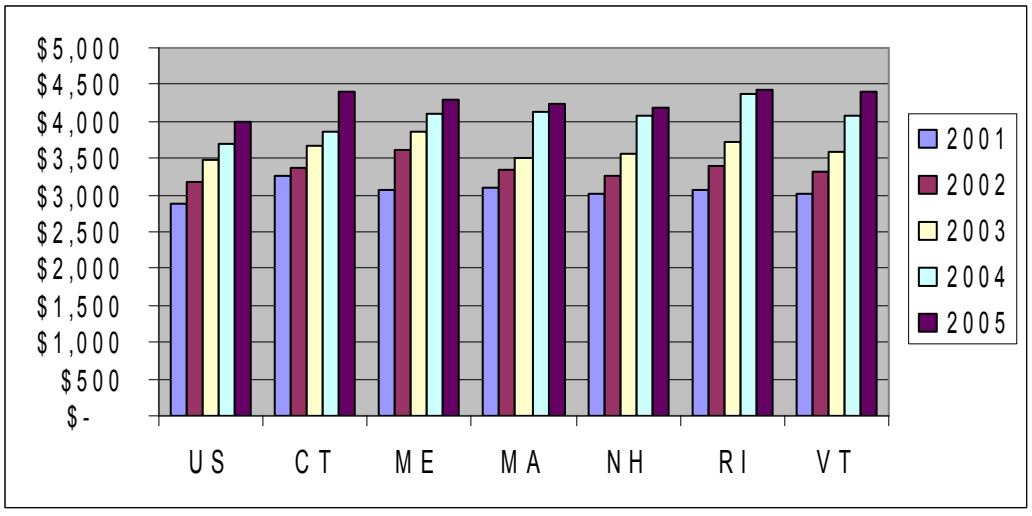
How do Maine's Premiums Compare to Other States?

Employer Premiums for Single Coverage, 2005						
	2001	2002	2003	2004	2005	avg annual change
US	$ 2,889	$ 3,189	$ 3,481	$ 3,705	$ 3,991	8.4%
CT	$ 3,260	$ 3,373	$ 3,676	$ 3,864	$ 4,390	7.8%
ME	$ 3,062	$ 3,603	$ 3,852	$ 4,116	$ 4,290	8.9%
MA	$ 3,086	$ 3,353	$ 3,496	$ 4,141	$ 4,235	8.4%
NH	$ 3,027	$ 3,263	$ 3,563	$ 4,084	$ 4,175	8.5%
RI	$ 3,063	$ 3,394	$ 3,725	$ 4,368	$ 4,417	9.7%
VT	$ 3,017	$ 3,306	$ 3,596	$ 4,074	$ 4,392	9.9%

Because the vast majority of Mainers and Americans get their insurance through their employers, this page looks at employer premiums -- rather than individual market premiums -- in different states as reported in an annual survey of employers done by the federal Agency for Healthcare Research and Quality (AHRQ, part of the Department of Health and Human Services) known as the Medical Expenditure Panel Survey (MEPS).

The charts below shows the average total annual premium paid by employers -- fully- and self-insured -- for single coverage in the US and the six New England states from 2001 to 2005 (the most recent year for which data are available).

The data show that New England premiums are consistently higher than US premiums, and that Maine's premiums are in line with the New England averages.



Notes: Premiums taken from MEPS Health Insurance Dataset -- Table II.D.1 Average total family premium [employee + employer share] per enrolled employee at private-sector establishments that offer health insurance by firm size and State -- available through www.meps.ahrq.gov/mepsweb/data_stats/quick_tables_search.jsp?component=2&subcomponent=2

MEPS did not include data for RI or VT for 2002 and NH for 2001 so for these years we use the midpoint between the previous and successive year as an estimated amount.

How do Maine's Premium Compare to Other States?

The MEPS data on the previous page does not take into account differences in the design of insurance plans -- such as deductible and co-payment levels -- which can vary business to business and state to state

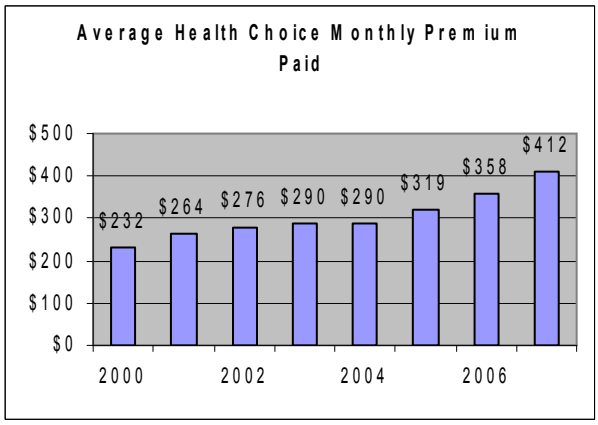
In order to address this, in 2006 Gabel and associates conducted an analysis that adjusted 2002 MEPS premiums to account for differences in plan design; i.e., the premiums are adjusted so that you are comparing plans with the same deductible and co-payment levels.

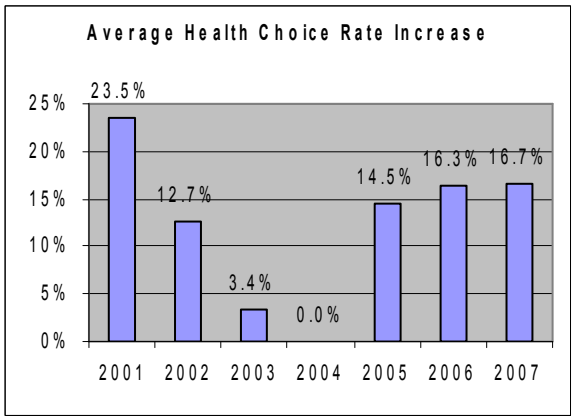
The table at right shows that once these adjustments have been made, Maine employer premiums were the second highest of the 43 states for which data were available, 11% higher than the median of those 43 states. In other words, you'd be paying 11% more in Maine for the same plan as the median of all the other states.

Gabel concluded that rural states in general have higher premiums, due to: (a) lack of managed care (e.g.; rigorous price negotiation); and (b)small business base -- lack negotiating clout of big businesses.

rank	state	2002 premium	% from median
NA	US median	$ 3,258	NA
1	HI	$ 2,717	-17%
2	CA	$ 2,833	-13%
3	OR	$ 2,954	-9%
4	AL	$ 2,981	-9%
5	AZ	$ 2,983	-8%
6	UT	$ 2,991	-8%
7	VA	$ 3,017	-7%
8	OH	$ 3,038	-7%
9	TN	$ 3,038	-7%
10	KS	$ 3,053	-6%
11	SC	$ 3,075	-6%
12	GA	$ 3,084	-5%
13	MO	$ 3,089	-5%
14	KY	$ 3,129	-4%
15	MD	$ 3,140	-4%
16	NM	$ 3,155	-3%
17	MA	$ 3,184	-2%
18	MI	$ 3,200	-2%
19	NH	$ 3,210	-1%
20	MS	$ 3,238	-1%
21	NC	$ 3,257	0%
22	CT	$ 3,258	0%
23	NY	$ 3,270	0%
24	PA	$ 3,299	1%
25	DE	$ 3,300	1%
26	CO	$ 3,302	1%
27	IA	$ 3,305	1%
28	TX	$ 3,305	1%
29	FL	$ 3,310	2%
30	OK	$ 3,328	2%
31	LA	$ 3,331	2%
32	IN	$ 3,336	2%
33	MN	$ 3,347	3%
34	NE	$ 3,367	3%
35	MT	$ 3,370	3%
36	WA	$ 3,374	4%
37	NV	$ 3,383	4%
38	NJ	$ 3,455	6%
39	IL	$ 3,519	8%
40	WV	$ 3,544	9%
41	WI	$ 3,582	10%
42	ME	$ 3,621	11%
43	WY	$ 4,001	23%
44	ID	No data	
45	ND	No data	
46	RI	No data	
47	SD	No data	
48	AK	No data	
49	AR	No data	
50	VT	No data	

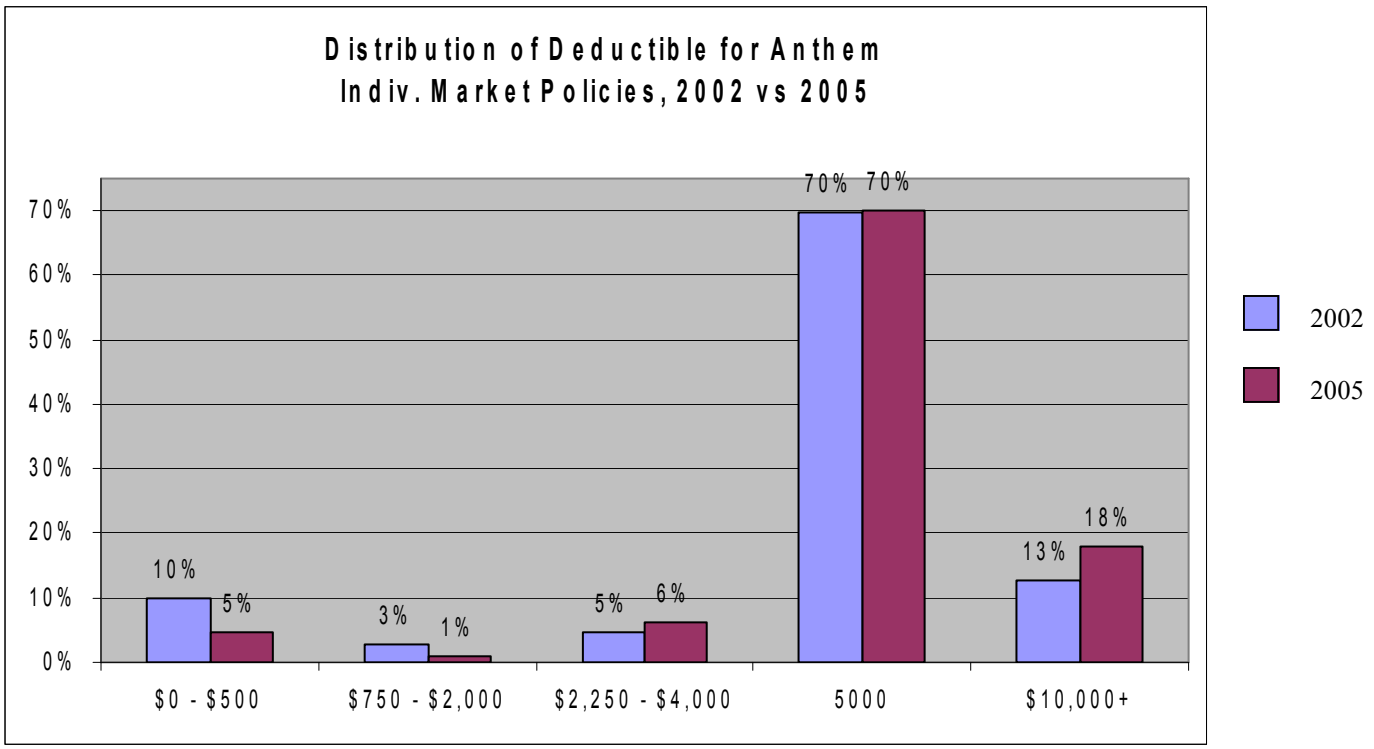
How do Maine's Premium Compare to Other States?





While MEPS provides an ongoing data source to compare employer premiums around the nation, there is no similar data source for individual market premiums, where 5% of the Maine and national under-65 population get their insurance. The two charts above includes Maine's Bureau of Insurance data showing recent increases in Maine's individual market premiums. The chart below includes Maine's Bureau of Insurance data showing an increase in high deductible plans.

Source for all three charts: BOI. *2007 premium paid includes only first 6 months of 2007.



What Drives Premium Costs? How Much is Admin vs Profit vs Claims?

Premiums are designed to cover two general sets of expenses -- (1) medical claims, and (2) administrative costs -- and to set aside some amount of profit. The percent of premiums spent on claims is known as a "medical loss ratio" (MLR).

The tables on the next few pages show data from insurance companies' CY 2006 filings with the Bureau of Insurance (BOI). The first table shows MLR and amount spent on claims, the second table shows the dollar value and percent of premium spent on administration, and the third table shows the dollar value and percent of premium kept as underwriting gain (profit).

Maine, since the 2003 Dirigo Health Reform Act, requires that insurers in the small group market (employers with fewer than 50 employees) either: (1) spend at least 78% of premiums collected over a rolling three year look-back period on claims (and if they spend less, they must refund the portion of premium sufficient to bring claims to 78% of premium collected); or (2) annually file rates for review and approval with BOI, with the requirement that at least 75% of premium be spent on claims. Prior to the Dirigo Act, there was no such requirement. Anthem, Cigna, and Aetna have chosen the first approach. Mega and United Health have chosen the second. The first three year period ended Jul 31, 2007. Reports are due to BOI Feb 1, 2008, and refunds -- if any -- must be paid by March 1.

Maine requires MLRs in the individual market are to be at least 65% on a prospective basis.

States do not regulate premiums in the large group market due to the fact that larger employers have sufficient size to negotiate their own premiums with insurers.

What Drives Premium Costs? How Much is Admin vs Profits vs Claims?

(1) Medical Loss Ratio; (2) Enrollees, (3) Dollar Amount Spent on Claims: 2006												
	Large Group			Small Group			Individual			Total		
Aetna	77%	29,673	$82,742,581	79%	29,475	$91,211,438	216%	75	$301,889	78%	59,223	$174,255,908
Anthem Health Plans of ME Inc.	90%	144,807	$548,652,721	79%	82,548	$230,355,139	90%	34,435	$85,467,276	87%	261,790	$864,475,136
CIGNA	89%	33,371	$125,325,945	NA			76%	16	$174,390	89%	33,387	$125,500,335
Harvard Pilgrim Health Care Inc.	92%	8,906	$26,053,411	91%	5173	$9,652,224	225%	14	$409,678	92%	14,093	$36,115,313
Mega Life & Health Insurance Co.	52%	31	$23,733	44%	3,143	$4,104,251	38%	6,797	$4,165,029	41%	9,971	$8,293,013
United Healthcare Insurance Co.	81%	889	$2,608,491	174%	98	$314,090	NA			86%	987	$2,922,581
Total	*88%*	*217,677*	*$785,406,882*	*79%*	*120,437*	*$335,637,142*	*85%*	*41,337*	*$90,518,262*	*85%*	*379,451*	*$1,211,562,286*

Source: Bureau of Insurance Summary of Carriers' Rule 945 filings

Note: A medical loss ratio of greater than 100%means that the carrier spent more than they collected on premiums

What Drives Premium Costs? How Much is Admin vs Profits vs Claims?

% of Premiums Paid and Representative Dollar Amount for Administrative Expenses: 2006								
	Large Group		Small Group		Individual		Total	
Aetna	16%	$16,771,266	16%	$18,276,200	18%	$25,089	16%	$35,072,555
Anthem Health Plans of ME Inc.	7%	$43,688,644	11%	$31,553,192	15%	$14,002,035	9%	$89,243,871
CIGNA	13%	$18,885,943	NA		7%	$16,218	13%	$18,902,161
Harvard Pilgrim Health Care Inc.	18%	$4,953,068	15%	$1,603,576	4%	$8,030	17%	$6,564,674
Mega Life & Health Insurance Co.	21%	$9,744	38%	$3,560,193	38%	$4,199,643	38%	$7,769,580
United Healthcare Insurance Co.	16%	$516,306	24%	$43,210			16%	$559,516
Total	*10%*	*$84,824,971*	*13%*	*$55,036,371*	*17%*	*$18,251,015*	*11%*	*$158,112,357*

Source:Bureau of Insurance Summary of Carriers' rule 945 filing

What Drives Premium Costs? How Much is Admin vs Profits vs Claims?

% of Premiums Paid and Representative Dollar Amount for Policy Reserve Increases 2006								
	Large Group		Small Group		Individual		Total	
Aetna	0%	$0	0%	$0	0%	$0	0%	$0
Anthem	0%	$0	0%	$0	0%	$0	0%	$0
CIGNA	1%	$815,000			0%	$0	1%	$815,000
Harvard Pilgrim Health Care Inc.	0%	$0	0%	$0	0%	$0	0%	$0
Mega Life & Health Insurance Co.	0%	$0	-14%	($1,356,129)	12%	$1,325,566	0%	($30,563)
United Healthcare Insurance Co.	1%	$39,543	2%	$4,427			1%	$43,970
Total	*4%*	*$854,543*	*0%*	*($1,351,702)*	*1%*	*$1,325,566*	*0%*	*$828,407*

Source:Bureau of Insurance Summary of Carriers' rule 945 filing

What Drives Premium Costs? How Much is Admin vs Profits vs Claims?

Net Underwriting Gain/Loss: 2006								
	Large Group		Small Group		Individual		Total	
Aetna	7%	$7,799,493	5%	$6,219,394	-134%	($187,030)	6%	$13,831,857
Anthem Health Plans of ME Inc.	3%	$18,861,560	10%	$28,607,917	-5%	($4,762,906)	4%	$42,706,571
CIGNA	-3%	($4,353,088)			17%	$38,394	-3%	($4,314,694)
Harvard Pilgrim Health Care Inc.	-10%	($2,710,638)	-6%	($622,754)	-129%	($235,399)	-9%	($3,568,791)
Mega Life & Health Insurance Co.	27%	$12,437	33%	$3,047,354	12%	$1,361,625	22%	$4,421,416
United Healthcare Insurance Co.	2%	$57,113	-101%	($181,686)			-4%	($124,573)
Total	*2%*	*$19,666,877*	*9%*	*$37,070,225*	*-4%*	*($3,785,316)*	*4%*	*$52,951,786*

Source:Bureau of Insurance Summary of Carriers' rule 945 filing

How Do Public and Private Adminstrative Percentage Compare?

		2004	2005	2006
MAINECARE	**%**	3.5%	4.5%	4.0%
MEDICARE	**%***	1.6%	1.6%	

Note that the Medicare percentage has been at 2% or under since 1995. Note also that Medicare spends approximately .5% additional on fraud and abuse detection.

Sources: MaineCare - DHHS; Medicare - Kaiser Medicare Chartbook

Provider Charges and Costs

85% of premium pays for medical claims, so reducing growth in medical claims can have significant impact on reducing growth in premiums.

The data on the next few pages provide data on medical claim spending in Maine versus other states from 1999-2004. One of the findings is that eight of the ten states with the highest per capita health care spending were in the northeast. We have highlighted Maine and the other New England states for easier viewing.

The data are from federal estimates of state health care spending just released September 18, 2007 by the Centers for Medicare and Medicaid Services. Prior to the release of this data the most recent state estimates had been through 1998.

The data does not explain why differences between states and over time exist, but can be useful in understanding what the differences and changes are.

The data show each state's health care spending broken out in three different ways: (1) by nine categories of service; (2) by three payor categories (total, Medicare, and Medicaid); (3) by total and per capita spending. CMS's definitions of the nine service areas are included after the last chart.

CMS does not break out private health care spending. Thus the "all other payors" category that we computed by subtracting Medicare and Medicaid from total spending includes such spending as Veterans Administration and Department of Defense, etc in addition to private insurance and out of pocket spending by the insured and uninsured. CMS told us that nationally, private spending comprises 71% of spending by the "all other payors" category, but they do not have this break out by state.

We computed the "per individual" spending for the "all other payors" category by dividing this category's total spending by the number of people in the state minus the number of people on Medicaid and Medicare. Because there could be some double counting – for example, some enrollees in Medicare may have supplemental coverage and may have private spending as well – this per individual amount should be considered an approximation of "per individual" spending for this category rather than a precise estimate.

Health Care Spending in Maine (millions) by Service, *CY 1999-2004

	1999	2000	2001	2002	2003	2004	avg annual chg	04 % of total
Hospital Care	$1,980	$2,118	$ 2,293	$2,492	$2,746	$3,035	8.9%	35%
Physician & Clinical Services	$1,153	$1,272	$1,455	$1,566	$1,726	$2,075	12.6%	24%
Drugs and Other Medical Nondurable's	$608	$686	$771	$868	$982	$1,052	11.6%	12%
Other Professional Services	$196	$200	$226	$232	$265	$305	9.4%	4%
Dental Services	$260	$293	$302	$326	$341	$363	7.0%	4%
Home Health Care	$190	$167	$159	$143	$162	$173	-1.4%	2%
Durable Medical Products	$72	$75	$77	$83	$90	$92	5.1%	1%
Nursing Home Care	$496	$514	$559	$580	$606	$630	4.9%	7%
Other Personal Health Care	$448	$473	$552	$646	$738	$869	14.3%	10%
TOTAL	**$5,403**	**$5,798**	**$6,396**	**$6,936**	**$7,658**	**$8,593**	**9.7%**	**100%**

*For definitions of each service, see CMS Definition Section
Source CMS Office of the Actuary

Avg Annual Change in Total Health Care Spending, by Payor 1999-2004

Maine had the fourth highest average annual percent increase in health care spending from 1999-2004: 9.7%, versus a national average of 7.4%.

all payors			Medicaid			Medicare			all others		
	US	7.4%		**US**	9.3%		**US**	7.0%		**US**	7.0%
	NE	7.2%		**NE**	7.5%		**NE**	6.2%		**NE**	7.4%
1	NV	11.2%	1	AZ	18.1%	1	AK	11.7%	1	NV	11.0%
2	AK	10.2%	2	GA	17.6%	2	NV	10.9%	2	VT	9.8%
3	VT	10.1%	3	AK	16.6%	3	UT	9.8%	3	ME	9.7%
4	ME	9.7%	4	ID	14.0%	4	DE	9.8%	4	WA	8.8%
5	AZ	9.2%	5	NM	13.7%	5	OR	9.4%	5	AK	8.6%
6	ID	8.8%	6	NV	13.1%	6	NC	9.0%	6	CO	8.4%
7	NC	8.8%	7	VT	13.0%	7	AZ	8.9%	7	UT	8.3%
8	DE	8.8%	8	MS	12.9%	8	SC	8.8%	8	NC	8.3%
9	UT	8.8%	9	FL	12.7%	9	NE	8.7%	9	NH	8.2%
10	WA	8.6%	10	MO	11.7%	10	HI	8.6%	10	VA	8.2%
11	CO	8.4%	11	WY	11.6%	11	MN	8.6%	11	DE	8.2%
12	MD	8.4%	12	ME	11.6%	12	ID	8.5%	12	NE	8.2%
13	NE	8.4%	13	OK	11.2%	13	NH	8.4%	13	WI	8.2%
14	VA	8.3%	14	DE	10.9%	14	WY	8.4%	14	MD	8.1%
15	MN	8.3%	15	IN	10.9%	15	WA	8.2%	15	MT	8.0%
16	MT	8.2%	16	MN	10.7%	16	CO	8.1%	16	ID	7.9%
17	WI	8.2%	17	AR	10.7%	17	VA	8.1%	17	RI	7.9%
18	NH	8.2%	18	SC	10.7%	18	WI	8.1%	18	OR	7.7%
19	WY	8.2%	19	NC	10.6%	19	MD	8.0%	19	MN	7.6%
20	SC	7.9%	20	UT	10.5%	20	VT	8.0%	20	KY	7.6%
21	FL	7.9%	21	OH	10.5%	21	MT	7.9%	21	WY	7.6%
22	OR	7.9%	22	MD	10.5%	22	NM	7.9%	22	AZ	7.4%
23	KY	7.8%	23	MT	10.3%	23	GA	7.8%	23	TX	7.3%
24	RI	7.7%	24	TN	10.3%	24	AL	7.8%	24	FL	7.2%
25	OH	7.7%	25	LA	10.0%	25	KY	7.6%	25	OH	7.2%
26	MS	7.7%	26	TX	9.6%	26	FL	7.6%	26	PA	7.2%
27	TN	7.6%	27	RI	9.6%	27	MS	7.5%	27	MA	7.1%
28	TX	7.6%	28	CA	9.4%	28	TN	7.4%	28	SC	7.1%
29	IN	7.6%	29	VA	9.4%	29	ND	7.4%	29	IN	7.0%
30	GA	7.5%	30	WI	9.2%	30	SD	7.3%	30	NY	7.0%
31	MO	7.4%	31	CO	9.0%	31	ME	7.3%	31	CA	6.9%
32	NM	7.3%	32	AL	9.0%	32	IN	7.3%	32	TN	6.9%
33	AR	7.2%	33	NE	8.9%	33	TX	7.3%	33	SD	6.8%
34	OK	7.2%	34	KY	8.9%	34	MI	7.2%	34	KS	6.8%
35	SD	7.1%	35	SD	8.9%	35	OK	7.2%	35	NJ	6.7%
36	CA	7.1%	36	IA	8.8%	36	OH	7.1%	36	WV	6.7%
37	KS	7.0%	37	HI	8.6%	37	WV	7.1%	37	ND	6.6%
38	PA	6.9%	38	PA	8.5%	38	KS	7.1%	38	MO	6.5%
39	NY	6.8%	39	KS	8.5%	39	AR	7.0%	39	OK	6.4%
40	WV	6.8%	40	WA	8.5%	40	IA	7.0%	40	AR	6.3%
41	MA	6.7%	41	NH	8.4%	41	IL	6.9%	41	CT	6.3%
42	ND	6.7%	42	IL	8.2%	42	CT	6.9%	42	MI	6.2%
43	NJ	6.7%	43	NY	7.4%	43	MO	6.7%	43	DC	6.2%
44	IA	6.6%	44	NJ	7.0%	44	NJ	6.4%	44	IA	6.2%
45	AL	6.5%	45	WV	6.9%	45	CA	6.2%	45	MS	6.1%
46	IL	6.5%	46	MA	6.8%	46	NY	5.7%	46	IL	6.0%
47	HI	6.3%	47	OR	6.8%	47	LA	5.4%	47	AL	5.6%
48	MI	6.2%	48	ND	6.4%	48	MA	5.4%	48	HI	5.4%
49	CT	6.2%	49	CT	5.3%	49	RI	5.1%	49	NM	5.2%
50	LA	5.6%	50	MI	4.9%	50	PA	5.0%	50	GA	5.0%
51	DC	5.4%	51	DC	4.9%	51	DC	3.3%	51	LA	4.3%

Per Capita & Per Enrolle Health Care Spending, by Payor 2004

Maine's per capita spending in 2004 was third highest in the US.

		per cap total			Medi-caid per en-rollee			Medi-care per en-rollee			approx per indiv all oth-ers
	US	$5,283		**US**	$6,119		**US**	$7,439		**US**	$4,685
	NE	$6,409		**NE**	$8,790		**NE**	$7,592		**NE**	$5,686
1	DC	$8,295	1	AK	$10,417	1	DC	$9,154	1	DC	$8,121
2	MA	$6,683	2	NJ	$10,199	2	LA	$8,659	2	ME	$6,180
3	ME	$6,540	3	NY	$10,173	3	MD	$8,535	3	DE	$6,159
4	NY	$6,535	4	NH	$9,997	4	NJ	$8,512	4	VT	$6,103
5	AK	$6,450	5	RI	$9,479	5	FL	$8,462	5	MA	$5,878
6	CT	$6,344	6	ND	$9,456	6	TX	$8,292	6	AK	$5,756
7	DE	$6,306	7	MN	$9,191	7	NY	$8,221	7	WV	$5,582
8	RI	$6,193	8	MA	$9,150	8	CT	$8,185	8	CT	$5,570
9	VT	$6,069	9	CT	$8,643	9	MA	$8,168	9	WI	$5,500
10	WV	$5,954	10	DC	$8,317	10	MI	$7,860	10	ND	$5,409
11	PA	$5,933	11	ME	$8,237	11	DE	$7,726	11	RI	$5,332
12	ND	$5,808	12	PA	$8,181	12	CA	$7,693	12	TN	$5,318
13	NJ	$5,807	13	IA	$7,877	13	MS	$7,644	13	MN	$5,180
14	MN	$5,795	14	NE	$7,684	14	IL	$7,604	14	PA	$5,141
15	OH	$5,725	15	MT	$7,665	15	PA	$7,520	15	NE	$5,129
16	WI	$5,670	16	OH	$7,439	16	OK	$7,415	16	SD	$5,115
17	NE	$5,599	17	MD	$7,229	17	OH	$7,343	17	OH	$5,074
18	MD	$5,590	18	KS	$6,780	18	AL	$7,250	18	NY	$5,023
19	FL	$5,483	19	NC	$6,735	19	NV	$7,248	19	KY	$4,999
20	KY	$5,473	20	IN	$6,569	20	AK	$7,128	20	IA	$4,955
21	TN	$5,464	21	GA	$6,551	21	GA	$7,044	21	WY	$4,950
22	MO	$5,444	22	CO	$6,426	22	TN	$7,041	22	KS	$4,919
23	NH	$5,432	23	MO	$6,370	23	MO	$7,029	23	AL	$4,890
24	KS	$5,382	24	WY	$6,348	24	IN	$6,973	24	MD	$4,887
25	IA	$5,380	25	WV	$6,342	25	RI	$6,925	25	MO	$4,866
26	SD	$5,327	26	SD	$6,235	26	SC	$6,919	26	WA	$4,845
27	IN	$5,295	27	KY	$6,200	27	KS	$6,903	27	NJ	$4,844
28	IL	$5,293	28	UT	$6,191	28	WV	$6,861	28	SC	$4,833
29	WY	$5,265	29	ID	$6,018	29	NC	$6,841	29	IL	$4,817
30	NC	$5,191	30	WI	$6,010	30	KY	$6,808	30	NH	$4,802
31	AL	$5,135	31	VT	$5,977	31	AZ	$6,642	31	HI	$4,787
32	SC	$5,114	32	VA	$5,971	32	CO	$6,590	32	IN	$4,770
33	WA	$5,092	33	OR	$5,880	33	NE	$6,532	33	FL	$4,757
34	MT	$5,080	34	DE	$5,616	34	AR	$6,529	34	MT	$4,648
35	MS	$5,059	35	IL	$5,576	35	MN	$6,435	35	AR	$4,604
36	MI	$5,058	36	LA	$5,562	36	VA	$6,373	36	NC	$4,552
37	LA	$5,040	37	FL	$5,486	37	NH	$6,302	37	OR	$4,480
38	HI	$4,941	38	TX	$5,410	38	WA	$6,200	38	MI	$4,465
39	OK	$4,917	39	NV	$5,340	39	WI	$6,198	39	VA	$4,443
40	OR	$4,880	40	WA	$5,339	40	UT	$6,142	40	CA	$4,430
41	AR	$4,863	41	MI	$5,213	41	OR	$6,116	41	MS	$4,410
42	VA	$4,822	42	OK	$5,208	42	VT	$6,028	42	OK	$4,336
43	CO	$4,717	43	MS	$5,081	43	WY	$6,019	43	CO	$4,284
44	CA	$4,638	44	HI	$4,974	44	ME	$6,015	44	LA	$4,142
45	TX	$4,601	45	NM	$4,944	45	ND	$5,823	45	NV	$4,082
46	GA	$4,600	46	TN	$4,820	46	IA	$5,767	46	NM	$4,066
47	NV	$4,569	47	SC	$4,680	47	ID	$5,764	47	ID	$3,974
48	NM	$4,471	48	AR	$4,305	48	HI	$5,708	48	TX	$3,940
49	ID	$4,444	49	AZ	$4,287	49	NM	$5,652	49	GA	$3,842
50	AZ	$4,103	50	AL	$4,089	50	MT	$5,650	50	AZ	$3,575
51	UT	$3,972	51	CA	$3,664	51	SD	$5,640	51	UT	$3,502

Payor Mix-Payments by Payor as % of Total Healthcare Spending

2004 Medicaid			2004 Medicare			2004 Other		
	US	17%		**US**	20%		**US**	63%
	NE	19%		**NE**	18%		**NE**	63%
1	NY	32%	1	FL	26%	1	CO	73%
2	NM	24%	2	LA	24%	2	UT	73%
3	ME	24%	3	MS	23%	3	VA	72%
4	DC	23%	4	AL	23%	4	NV	71%
5	RI	22%	5	OK	23%	5	AK	71%
6	MS	22%	6	MI	23%	6	WY	70%
7	GA	21%	7	AR	22%	7	HI	70%
8	LA	21%	8	WV	22%	8	ND	70%
9	AK	20%	9	PA	22%	9	WI	70%
10	VT	20%	10	AZ	21%	10	KS	70%
11	TN	20%	11	NJ	21%	11	SD	70%
12	MA	19%	12	MO	20%	12	MT	69%
13	AR	19%	13	SC	20%	13	WA	69%
14	MO	19%	14	KY	20%	14	NH	69%
15	AZ	18%	15	TX	20%	15	NE	69%
16	NC	18%	16	TN	20%	16	OR	68%
17	MN	18%	17	NV	20%	17	IA	68%
18	WV	18%	18	OH	19%	18	DE	68%
19	KY	17%	19	CT	19%	19	ID	67%
20	PA	17%	20	CA	19%	20	MN	67%
21	CA	17%	21	NC	19%	21	MD	67%
22	SC	17%	22	IL	19%	22	IN	67%
23	CT	17%	23	MD	19%	23	IL	66%
24	OH	17%	24	IN	19%	24	TX	65%
25	WA	16%	25	KS	19%	25	NJ	65%
26	ID	15%	26	MA	18%	26	VT	65%
27	IL	15%	27	OR	18%	27	CT	64%
28	TX	15%	28	DE	18%	28	MI	64%
29	NH	15%	29	NY	18%	29	OH	64%
30	IA	15%	30	RI	18%	30	AL	63%
31	NJ	15%	31	IA	18%	31	CA	63%
32	OK	14%	32	MT	17%	32	OK	63%
33	IN	14%	33	NE	17%	33	KY	63%
34	DE	14%	34	VA	17%	34	NC	63%
35	NE	14%	35	NM	17%	35	DC	63%
36	MD	14%	36	ID	17%	36	SC	63%
37	WY	14%	37	GA	17%	37	MA	62%
38	OR	14%	38	SD	17%	38	GA	62%
39	MI	14%	39	NH	17%	39	FL	61%
40	MT	14%	40	ND	16%	40	MO	61%
41	WI	14%	41	HI	16%	41	PA	61%
42	AL	14%	42	WI	16%	42	AZ	60%
43	HI	14%	43	ME	16%	43	TN	60%
44	SD	14%	44	WY	16%	44	ME	60%
45	ND	14%	45	WA	16%	45	WV	60%
46	UT	13%	46	CO	15%	46	RI	60%
47	FL	12%	47	VT	15%	47	NM	59%
48	KS	12%	48	MN	15%	48	AR	59%
49	CO	11%	49	UT	14%	49	LA	55%
50	VA	10%	50	DC	14%	50	MS	54%
51	NV	9%	51	AK	8%	51	NY	50%

Per Capita Health Care Spending and Average Annual Change 1999-2004 by Service

Hospital Care (37% of 04 US total)				Physician & Clinical Services (25%)				Rx & Other Med. Nondurables (14%)			
		2004 per cap	avg ann chg 99-04			2004 per cap	avg ann chg 99-04			2004 per cap	avg ann chg 99-04
	US	$1,931	6.0%		**US**	$1,341	6.3%		**US**	$757	10.2%
	NE	$2,340	7.0%		**NE**	$1,426	6.1%		**NE**	$859	11.3%
1	DC	$4,081	4.5%	1	AK	$1,858	10.9%	1	RI	$988	12.2%
2	MA	$2,620	7.0%	2	DC	$1,767	9.1%	2	TN	$983	12.8%
3	AK	$2,594	7.5%	3	ME	$1,579	11.7%	3	NJ	$959	10.6%
4	WV	$2,447	6.4%	4	TN	$1,541	6.9%	4	KY	$946	11.9%
5	ND	$2,411	5.8%	5	WI	$1,535	9.8%	5	AL	$939	11.7%
6	NY	$2,362	5.7%	6	MN	$1,523	6.7%	6	CT	$929	11.5%
7	VT	$2,329	9.9%	7	FL	$1,522	6.0%	7	DE	$928	11.3%
8	DE	$2,313	6.9%	8	KS	$1,513	8.3%	8	NY	$919	11.9%
9	ME	$2,310	7.7%	9	DE	$1,482	7.6%	9	WV	$898	10.5%
10	SD	$2,276	7.0%	10	CT	$1,475	4.9%	10	PA	$896	9.9%
11	RI	$2,259	7.0%	11	WA	$1,451	8.5%	11	FL	$895	9.8%
12	MO	$2,259	6.6%	12	NV	$1,451	7.2%	12	NC	$873	12.8%
13	NE	$2,254	7.9%	13	OR	$1,433	6.9%	13	MA	$849	11.2%
14	OH	$2,166	7.5%	14	MD	$1,421	8.0%	14	ND	$845	13.3%
15	WY	$2,165	7.4%	15	MA	$1,416	5.5%	15	MD	$827	10.2%
16	PA	$2,158	5.7%	16	NJ	$1,414	5.4%	16	MO	$811	12.5%
17	MS	$2,119	6.0%	17	VT	$1,408	10.3%	17	OH	$803	9.7%
18	WI	$2,114	7.8%	18	KY	$1,388	8.8%	18	SC	$803	11.7%
19	MT	$2,099	6.8%	19	CO	$1,386	6.8%	19	ME	$800	11.4%
20	IA	$2,092	5.7%	20	CA	$1,379	3.8%	20	LA	$798	10.6%
21	MD	$2,081	6.5%	21	AL	$1,372	6.2%	21	IN	$796	10.3%
22	IN	$2,051	6.8%	22	PA	$1,369	7.7%	22	MI	$772	9.4%
23	LA	$2,034	4.7%	23	NH	$1,354	5.5%	23	NV	$766	9.1%
24	IL	$2,029	5.0%	24	WV	$1,350	6.9%	24	MS	$763	11.3%
25	CT	$2,012	5.9%	25	OH	$1,337	8.0%	25	VA	$756	10.4%
26	MI	$2,002	5.2%	26	IL	$1,336	6.1%	26	NH	$741	10.3%
27	KY	$2,001	5.6%	27	NY	$1,329	5.9%	27	NE	$737	9.9%
28	SC	$1,982	5.5%	28	WY	$1,326	8.6%	28	HI	$734	10.4%
29	MN	$1,965	8.2%	29	NE	$1,309	9.9%	29	GA	$727	10.1%
30	NJ	$1,962	5.3%	30	SC	$1,309	8.4%	30	IL	$716	9.4%
31	NH	$1,941	8.3%	31	TX	$1,278	6.6%	31	VT	$715	11.8%
32	NC	$1,910	6.4%	32	IN	$1,264	6.9%	32	MN	$714	10.2%
33	OK	$1,890	6.7%	33	HI	$1,260	2.9%	33	AR	$705	10.3%
34	KS	$1,883	5.3%	34	IA	$1,259	7.0%	34	OK	$702	10.4%
35	AR	$1,854	5.4%	35	GA	$1,257	5.0%	35	WI	$697	9.2%
36	HI	$1,834	5.3%	36	MT	$1,249	9.7%	36	KS	$693	10.3%
37	TN	$1,826	5.5%	37	VA	$1,234	7.2%	37	IA	$684	10.1%
38	FL	$1,813	5.4%	38	RI	$1,228	6.8%	38	UT	$658	9.2%
39	VA	$1,788	6.1%	39	OK	$1,222	6.8%	39	AK	$636	9.6%
40	AL	$1,757	4.1%	40	AR	$1,207	7.6%	40	TX	$616	8.3%
41	NM	$1,744	4.9%	41	NC	$1,201	7.4%	41	WA	$611	7.8%
42	TX	$1,728	5.8%	42	ND	$1,200	7.1%	42	ID	$598	10.2%
43	WA	$1,725	8.0%	43	MO	$1,198	6.7%	43	WY	$597	9.4%
44	OR	$1,671	7.5%	44	SD	$1,195	5.2%	44	DC	$594	8.4%
45	CO	$1,658	7.0%	45	AZ	$1,193	6.3%	45	NM	$593	9.3%
46	ID	$1,648	6.3%	46	LA	$1,173	4.7%	46	AZ	$588	8.5%
47	GA	$1,635	4.2%	47	MI	$1,165	6.4%	47	CA	$580	10.2%
48	CA	$1,613	6.2%	48	MS	$1,113	6.8%	48	SD	$572	8.6%
49	NV	$1,483	7.1%	49	ID	$1,051	5.8%	49	OR	$569	7.0%
50	AZ	$1,479	6.5%	50	NM	$1,013	4.9%	50	MT	$539	7.1%
51	UT	$1,432	6.9%	51	UT	$988	7.3%	51	CO	$510	6.7%

Per Capita Health Care Spending and Average Annual Change 1999-2004 by Service

Dental Services (5% of 04 US total)				Home Health Care (3%)				Other Professional Services (3%)			
		2004 per cap	avg ann chg 99-04			2004 per cap	avg ann chg 99-04			2004 per cap	avg ann chg 99-04
	US	$277	6.1%		**US**	$145	3.4%		**US**	$179	5.5%
	NE	$347	6.9%		**NE**	$211	2.5%		**NE**	$211	4.5%
1	WA	$404	5.7%	1	NY	$312	3.3%	1	DE	$253	8.2%
2	CT	$382	7.3%	2	MA	$271	5.3%	2	AK	$249	12.2%
3	AK	$366	5.3%	3	NM	$237	25.8%	3	CT	$245	3.4%
4	NH	$363	9.7%	4	CT	$203	0.3%	4	ME	$232	8.8%
5	MA	$354	6.7%	5	MS	$167	5.2%	5	WY	$231	11.2%
6	OR	$354	5.0%	6	FL	$166	1.3%	6	NJ	$221	3.4%
7	DE	$337	7.4%	7	NC	$166	4.8%	7	WA	$220	7.0%
8	ID	$336	7.7%	8	NJ	$164	4.2%	8	ID	$217	10.1%
9	NJ	$335	4.9%	9	TX	$160	1.1%	9	VT	$212	10.2%
10	CO	$334	7.1%	10	CA	$154	12.8%	10	PA	$211	5.0%
11	MN	$329	7.1%	11	VT	$152	3.3%	11	CO	$204	6.3%
12	CA	$324	4.5%	12	AL	$146	3.5%	12	FL	$203	3.8%
13	VT	$319	7.2%	13	LA	$139	1.1%	13	MA	$200	3.3%
14	DC	$315	4.8%	14	DC	$134	2.0%	14	WV	$199	11.1%
15	MI	$312	6.7%	15	MN	$133	4.7%	15	OR	$199	9.1%
16	WI	$308	6.7%	16	OH	$133	2.3%	16	OH	$199	7.1%
17	HI	$303	5.8%	17	WA	$133	7.5%	17	MN	$197	4.9%
18	UT	$297	5.7%	18	ME	$132	-2.8%	18	KY	$192	8.6%
19	NV	$291	7.0%	19	OK	$132	1.3%	19	IA	$188	6.1%
20	NY	$282	6.5%	20	MI	$131	5.5%	20	MI	$188	5.2%
21	MD	$280	8.4%	21	NH	$130	1.1%	21	WI	$187	3.9%
22	ME	$276	6.6%	22	KY	$128	-1.7%	22	MT	$186	10.1%
23	ND	$274	7.9%	23	TN	$125	0.6%	23	NY	$186	7.6%
24	IL	$274	6.8%	24	MO	$123	1.0%	24	IL	$186	7.2%
25	VA	$273	8.5%	25	PA	$123	2.9%	25	MD	$186	4.6%
26	RI	$272	2.9%	26	AR	$118	1.2%	26	KS	$182	6.4%
27	MT	$269	7.0%	27	WI	$117	5.3%	27	HI	$178	12.6%
28	WY	$265	6.8%	28	AZ	$114	8.6%	28	RI	$178	6.3%
29	NC	$264	8.3%	29	DE	$113	-1.4%	29	SD	$176	7.8%
30	KS	$264	6.0%	30	WV	$109	-1.0%	30	TN	$176	7.2%
31	FL	$259	5.7%	31	RI	$107	-4.3%	31	NH	$176	7.0%
32	PA	$258	8.2%	32	IA	$105	2.2%	32	NE	$174	8.1%
33	IN	$258	7.7%	33	SC	$101	-0.9%	33	CA	$172	5.0%
34	AZ	$254	7.3%	34	UT	$101	7.4%	34	DC	$170	3.4%
35	SD	$253	8.0%	35	IL	$100	2.0%	35	NM	$169	8.0%
36	GA	$253	6.8%	36	NV	$99	1.8%	36	AR	$168	5.0%
37	OH	$253	6.3%	37	AK	$98	43.6%	37	MO	$167	6.1%
38	IA	$249	7.3%	38	GA	$98	-1.6%	38	AZ	$162	6.8%
39	TN	$243	7.9%	39	MT	$96	4.7%	39	ND	$162	6.7%
40	NE	$242	6.5%	40	MD	$92	1.2%	40	IN	$161	5.7%
41	SC	$239	7.5%	41	KS	$88	1.3%	41	NV	$159	6.0%
42	OK	$239	7.4%	42	HI	$84	6.9%	42	OK	$159	4.8%
43	MO	$232	6.5%	43	ID	$82	7.5%	43	LA	$157	6.3%
44	NM	$224	7.1%	44	IN	$82	1.2%	44	NC	$157	6.1%
45	AR	$219	7.3%	45	VA	$81	0.9%	45	AL	$151	6.8%
46	AL	$216	6.7%	46	CO	$80	-0.9%	46	VA	$150	6.5%
47	KY	$212	8.3%	47	OR	$56	2.7%	47	TX	$141	3.8%
48	WV	$212	7.6%	48	WY	$55	-0.5%	48	GA	$140	5.3%
49	TX	$211	3.6%	49	NE	$45	-4.7%	49	UT	$137	2.8%
50	MS	$175	7.0%	50	ND	$28	-0.7%	50	SC	$127	3.2%
51	LA	$174	2.1%	51	SD	$26	5.8%	51	MS	$121	8.3%

Per Capita Health Care Spending and Average Annual Change 1999-2004 by Service

Durable Medical Products (1%)					Nursing Home Care (7%)					Other Personal Health Care (3%)				
		2004 per cap		avg ann chg 99-04			2004 per cap		avg ann chg 99-04			2004 per cap		avg ann chg 99-04
	US	$	79	2.6%		**US**	$	392	3.2%		**US**	$	181	8.7%
	NE	$	80	3.0%		**NE**	$	622	2.4%		**NE**	$	314	8.7%
1	NE	$	149	2.6%	1	DC	$	780	-0.2%	1	ME	$	661	16.1%
2	NJ	$	111	4.4%	2	CT	$	776	2.4%	2	RI	$	533	8.8%
3	DC	$	102	1.6%	3	NY	$	693	4.5%	3	VT	$	483	12.6%
4	CO	$	96	2.7%	4	MA	$	641	1.9%	4	AK	$	435	14.7%
5	DE	$	95	1.5%	5	PA	$	611	4.6%	5	MN	$	380	15.1%
6	HI	$	94	1.2%	6	ND	$	608	5.5%	6	NY	$	365	7.6%
7	AK	$	93	2.6%	7	OH	$	596	5.0%	7	DC	$	351	6.5%
8	MT	$	92	6.3%	8	RI	$	570	3.7%	8	DE	$	292	8.7%
9	WY	$	92	2.4%	9	IA	$	549	3.8%	9	KS	$	274	8.8%
10	MD	$	91	3.8%	10	SD	$	527	4.9%	10	WV	$	273	8.0%
11	CT	$	91	2.2%	11	DE	$	493	6.0%	11	OR	$	271	9.3%
12	FL	$	91	1.0%	12	NE	$	492	3.5%	12	MA	$	254	7.3%
13	NH	$	90	3.8%	13	NJ	$	491	4.0%	13	WY	$	237	11.2%
14	NV	$	90	2.0%	14	ME	$	480	3.3%	14	CT	$	232	6.3%
15	MN	$	89	1.0%	15	MN	$	465	1.2%	15	PA	$	225	9.4%
16	IA	$	88	3.7%	16	IN	$	461	2.9%	16	SD	$	224	9.6%
17	NY	$	87	1.9%	17	WI	$	437	1.9%	17	NM	$	221	9.0%
18	ND	$	86	3.8%	18	MD	$	436	5.5%	18	HI	$	220	9.9%
19	VA	$	84	2.9%	19	MO	$	431	2.3%	19	NH	$	215	3.7%
20	PA	$	83	3.9%	20	NH	$	422	3.7%	20	MT	$	203	16.4%
21	OR	$	78	3.9%	21	IL	$	407	3.4%	21	WI	$	198	9.8%
22	KS	$	78	3.4%	22	KS	$	406	2.2%	22	ND	$	196	9.3%
23	WA	$	78	3.4%	23	WV	$	395	3.7%	23	NE	$	195	12.3%
24	MA	$	78	2.6%	24	NC	$	393	3.4%	24	CO	$	193	10.8%
25	IL	$	78	2.4%	25	AR	$	378	3.2%	25	SC	$	192	5.9%
26	OH	$	77	2.1%	26	MS	$	378	6.3%	26	ID	$	180	15.4%
27	SD	$	77	1.8%	27	VT	$	378	3.8%	27	OK	$	177	7.6%
28	MI	$	77	0.7%	28	TN	$	376	1.2%	28	MD	$	176	10.1%
29	IN	$	76	2.7%	29	FL	$	374	2.8%	29	WA	$	172	7.5%
30	WI	$	76	1.4%	30	KY	$	369	2.6%	30	KY	$	170	9.4%
31	NM	$	74	3.6%	31	LA	$	360	4.1%	31	GA	$	167	9.0%
32	AZ	$	74	2.2%	32	MT	$	348	3.9%	32	IL	$	167	9.6%
33	MO	$	74	2.2%	33	OK	$	329	2.9%	33	NC	$	166	8.2%
34	TX	$	74	2.2%	34	VA	$	328	4.8%	34	IA	$	165	9.5%
35	TN	$	73	3.9%	35	AL	$	326	4.1%	35	MS	$	163	15.3%
36	VT	$	72	4.3%	36	MI	$	316	2.7%	36	OH	$	162	13.2%
37	ID	$	72	2.3%	37	WA	$	300	1.9%	37	FL	$	159	9.9%
38	WV	$	71	3.8%	38	WY	$	297	3.5%	38	AL	$	157	8.8%
39	CA	$	71	2.3%	39	SC	$	295	3.7%	39	AR	$	153	10.2%
40	UT	$	71	0.8%	40	ID	$	259	2.4%	40	MO	$	150	6.1%
41	AL	$	70	6.2%	41	CO	$	256	2.8%	41	NJ	$	150	8.7%
42	ME	$	70	3.8%	42	GA	$	254	3.3%	42	IN	$	146	17.4%
43	GA	$	69	1.6%	43	OR	$	250	1.0%	43	LA	$	146	11.3%
44	KY	$	68	4.6%	44	TX	$	249	2.0%	44	TX	$	144	6.9%
45	OK	$	68	3.0%	45	CA	$	235	3.5%	45	VA	$	127	7.4%
46	SC	$	66	3.1%	46	HI	$	233	6.0%	46	TN	$	122	9.2%
47	NC	$	61	0.1%	47	NM	$	196	4.8%	47	UT	$	111	9.1%
48	MS	$	60	7.5%	48	AZ	$	178	0.8%	48	CA	$	109	8.8%
49	AR	$	60	7.0%	49	UT	$	177	3.6%	49	MI	$	95	2.7%
50	LA	$	60	3.8%	50	NV	$	146	6.3%	50	NV	$	83	5.5%
51	RI	$	57	3.7%	51	AK	$	122	8.8%	51	AZ	$	62	2.6%

CMS Definitions of Service Categories

Hospital Care

Hospital care expenditure estimates (NAICS 622) reflect spending for all services that are provided to patients and that are billed by the hospital. Expenditures include revenues received to cover room and board, ancillary services such as operating room fees, services of hospital residents and interns, inpatient pharmacy, hospital-based nursing home care, care delivered by hospital-based HHAs, and fees for any other services billed by the hospital. We exclude expenditures of physicians who bill independently for services delivered to patients in hospitals. These independently-billing physicians are included in the physician sector.

We estimate hospital expenditures in two pieces: (1) non-Federal hospitals and (2) Federal hospitals. The non-Federal hospital expenditures are estimated using American Hospital Association (AHA) Annual Survey data that capture information from registered and non-registered hospitals for each State (American Hospital Association, 2004). To estimate spending in Federal hospitals, we use State level data from the Federal agencies that administer those facilities.

Physician and Clinical Services

We estimate the expenditures for physician services (NAICS 6211, 6214 and a portion of 6215) in three pieces: (1) expenditures in private physician offices and clinics and specialty clinics (Specialty clinics include family planning centers, outpatient mental health and substance abuse centers, all other outpatient care facilities, and kidney dialysis centers); (2) fees of independently billing laboratories; and (3) clinics operated by the U.S. Department of Veterans Affairs (DVA) and the U.S. Indian Health Service.

Expenditures in private physician offices and clinics and specialty clinics are based on State distributions of business receipts from taxable establishments and on revenues from tax-exempt establishments, as reported in the 1977, 1982, 1987, 1992, 1997 and 2002 CSI (U.S. Bureau of the Census, 2005). To estimate the distribution of expenditures among States between Census years and for 2003-2004, we use growth in business receipts of sole proprietorships, partnerships, and corporations for taxable establishments (U.S. Internal Revenue Service, 2004). For tax-exempt establishments, we use growth in resident population (U.S. Bureau of the Census, 2006).

To estimate independently-billing laboratory expenditures, we use distributions by State of business receipts in taxable physician establishments as described above. These expenditures are then added to the estimates of physician and clinical services.

Some physicians may receive professional fees that are paid for by hospitals. These professional fees are included with hospital expenditures and not with physician expenditures; therefore we subtract them from the physician estimates. The estimates of professional fees by State are based on professional fee expenses from the AHA Annual Surveys for 1980, 1985, and 1990-1993. Using AHA community hospital revenues, we interpolate and extrapolate professional fee expenditures by State for intervening years and for 1994-2004.

CMS Definitions of Service Categories- Continued

Other Professional Services

We estimate expenditures for other professional services (NAICS 6213) by first estimating expenditures for the services of licensed professionals such as chiropractors, optometrists, podiatrists, and independently practicing nurses using CSI and BMF data, just as we do for taxable physician offices and clinics and specialty clinics. (There are no tax-exempt establishments for licensed other professionals.) The distributions for 1997-2004 were extrapolated using growth in wages and salaries in offices and clinics of medical and osteopathic physicians and specialty clinics (U.S. Bureau of Labor Statistics, 2006). We use Medicare data to separately estimate spending for Medicare ambulance services, which are then added to expenditures for other professionals.

Dental Services

Expenditures in Offices and Clinics of Dentists (NAICS 6212) are based on State distributions of business receipts from taxable establishments reported in the 1977, 1982, 1987, 1992, 1997, and 2002 CSI (U.S. Bureau of the Census, 2005). (No tax-exempt dental offices and clinic establishments report in the CSI.) To estimate State distributions for intervening years and to extrapolate for 2003-2004, we use business receipts from the BMF for sole proprietorships, partnerships, and corporations (U.S. Internal Revenue Service, 2004).

Home Health Care

We base expenditure estimates for care provided in freestanding HHAs (NAICS 6216) on CSI-based revenue for taxable businesses and receipts for tax-exempt businesses (U.S. Bureau of the Census, 2005). Because a separate SIC for HHAs (SIC 8082) was first created with the release of the 1987 SIC, data for this service category are available for 1987, 1992, 1997, and 2002 only and serve as a benchmark for private spending on freestanding home health services by State. Comparing Medicare reimbursements for government-owned HHAs with Medicare reimbursements for all ownership types of HHAs, we develop separate estimates of spending for government-supplied home health services (not surveyed by the CSI) for 1987, 1992, 1997 and 2002. We then sum expenditures for services from government and private HHAs. Next, using expenditures for home health services paid by Medicare and Medicaid, we interpolate and extrapolate estimates for 1980-1986 and 1988-1991. For 1993-1996, 1998-2001, and 2003-2004, we interpolate and extrapolate using the growth in private wages and salaries paid by home health care establishments (U.S. Bureau of Labor Statistics, 2006).

CMS Definitions of Service Categories- Continued

Nursing Home Care

Expenditures reported in this category are for services provided by freestanding nursing homes. These facilities are defined in the NAICS as establishments primarily engaged in providing inpatient nursing and rehabilitative services and continuous personal care services to persons requiring nursing care (NAICS 6231) and continuing care retirement communities with on-site nursing care facilities (NAICS 623311). These services do not include nursing home services provided in long-term care units of hospitals.

The nursing home estimates are prepared in four pieces: (1) private nursing homes; (2) State and local nursing homes; (3) nursing homes operated by the U.S. Department of Veterans Affairs ; and (4) intermediate care facilities for the mentally retarded (ICF/MRs).

To estimate spending in private nursing homes, we use revenues for taxable businesses and receipts for tax-exempt businesses from the CSI for 1977, 1982, 1987, 1992, 1997, and 2002 (U.S. Bureau of the Census, 2005). We interpolate and extrapolate revenues and receipts by State using wages and salaries paid in private nursing home establishments (U.S. Bureau of Labor Statistics, 2005). To estimate expenditures in State and local government nursing homes, we inflate wages and salaries paid in these nursing homes using the ratio of revenues to salaries paid in private nursing homes. We estimate spending for nursing home care in DVA facilities from State-specific data furnished by the DVA. To estimate spending for ICF/MRs, we use Medicaid expenditures for nursing home care in ICF/MRs reported by State Medicaid agencies on Form CMS-64 (Centers for Medicare & Medicaid Services, 1980-2004).

Prescription Drugs and Other Non-Durable Medical Products

We estimate this category in two parts: spending for prescription drugs and spending for non-prescription (over-the-counter) medicines and sundries. For both parts, we base our estimates on retail sales data reported in the 1977, 1982, 1987, 1992, 1997 and 2002 Census of Retail Trade, Merchandise Line Sales (U.S. Bureau of the Census, 2005). We interpolate distributions for intervening years using population data (U.S. Bureau of the Census, 2006).

In the case of prescription drugs, we extrapolate expenditures for 2003 and 2004 using State data reported in the Retail Prescription Method of Payment Report (IMS Health, 2004). For non-prescription drugs, we extrapolate expenditures for 2003 and 2004 using population data (U.S. Bureau of the Census, 2006).

CMS Definitions of Service Categories- Continued

Durable Medical Products

Using State data from the Census of Retail Trade for 1977, 1982, 1987, 1992, 1997, and 2002 (U.S. Bureau of the Census, 2005), we estimate expenditures for optical goods sold in retail establishments. To estimate optical goods sales that occur in optometrist offices, we use optometrist offices' business receipts from the 1977, 1982, 1987, 1992, 1997, and 2002 CSI (U.S. Bureau of the Census, 2005). We rely on per capita personal income statistics (U.S Bureau of Economic Analysis, 2006) to extrapolate and interpolate estimates of optical sales for years when actual retail sales are not available.

Other Personal Health Care

Privately funded other personal health care consists of industrial in-plant services provided by employers for the health care needs of their employees. First, we obtain the number of occupational health nurses for 1984, 1992, 1996, and 2000 (Health Resources and Services Administration, 1985, 1993, 1997 and 2001). Next, using non-farm wage and salary employment data by State (U.S. Bureau of Economic Analysis, 2005b), we interpolate and extrapolate the number of occupational health nurses for intervening years. Finally, we multiply our estimates of occupational health nurses with average annual wages in the health services sector (U.S. Bureau of Economic Analysis, 2005a and 2005b).

Publicly funded expenditures from this category include medical care delivered in non-traditional medical provider sites. Some examples are senior citizen centers, schools, and military field stations. One of the largest categories of government spending for Other Personal Health Care is comprised of Home and Community-Based Waivers under the Medicaid program. Under this portion of Medicaid, States may apply for waivers of some of the statutory provisions in order to provide care to beneficiaries who would otherwise require long-term inpatient care in a hospital or nursing home. Examples of types of services provided are habilitation, respite care, and environmental modifications. This care is frequently delivered in community centers, senior citizen centers and through home visits by various kinds of medical and non-medical personnel.

Provider Charges and Costs

The CMS data on the previous sheets showed the total amount paid by each payor for various services.

The total amount paid by each payor for a service is a function of two factors: (1) price paid per unit, and (2) utilization.

According to Dr. David Wennberg of the Dartmouth Atlas Project, which "works to accurately describe how medical resources are distributed and used in the United States," 25% of the variation between market areas' health care spending is accounted for by differences in cost-per unit, while 75% is accounted for by the number of units consumed.

Price paid is driven by a range of factors, including: (1) how efficient a provider is -- less efficient providers will need to charge a higher price to cover their higher expenses; and (2) cost shifting from uncompensated care and, in some cases, from public payors' paying less than cost.

Data on the next few pages address the efficiency of Maine hospitals, as data for other providers is not available. The data show that it is difficult to assess at this time how the efficiency of Maine hospitals in general compares to other states' hospitals, but it is clear that there is a degree of variation within Maine.

Provider Charges and Costs

How efficient are Maine's hospitals compared to hospitals in other states when it comes to average episode of treatment? Can one hospital treat the same patient as effectively as another with lower costs?

In this case, costs refers to what a hospital spends (on things ranging from wages and benefits, to blood, bandages and other supplies, to utilities, to technology) when caring for patients, not what it is paid.

To get the cost per episode (or unit) of treatment, you need to divide hospital's total annual expenses– which is a straight forward thing to measure– by the number of units of treatment the hospital provided that year. Unfortunately, defining the unit is more difficult, due largely to the outpatient area, and the picture you get of a hospital's efficiency– it's cost per unit– may depend on what data and methodology you use.

Provider Charges and Costs

Inpatient standardized unit

- This is a straightforward and widely agreed upon measure for inpatient unit costs because:
- What comprises the unit is clear: a discharge from the hospital.
- The DRG system used by Medicare and many private payors to reimburse for inpatient services since the early 1980s is an agreed-upon way to adjust the unit for severity (relative illness and complexity). This allows for apples to apples comparison of hospitals, even if their patients have different sickness levels. The resulting measure is "cost per case-mix adjusted inpatient discharge."

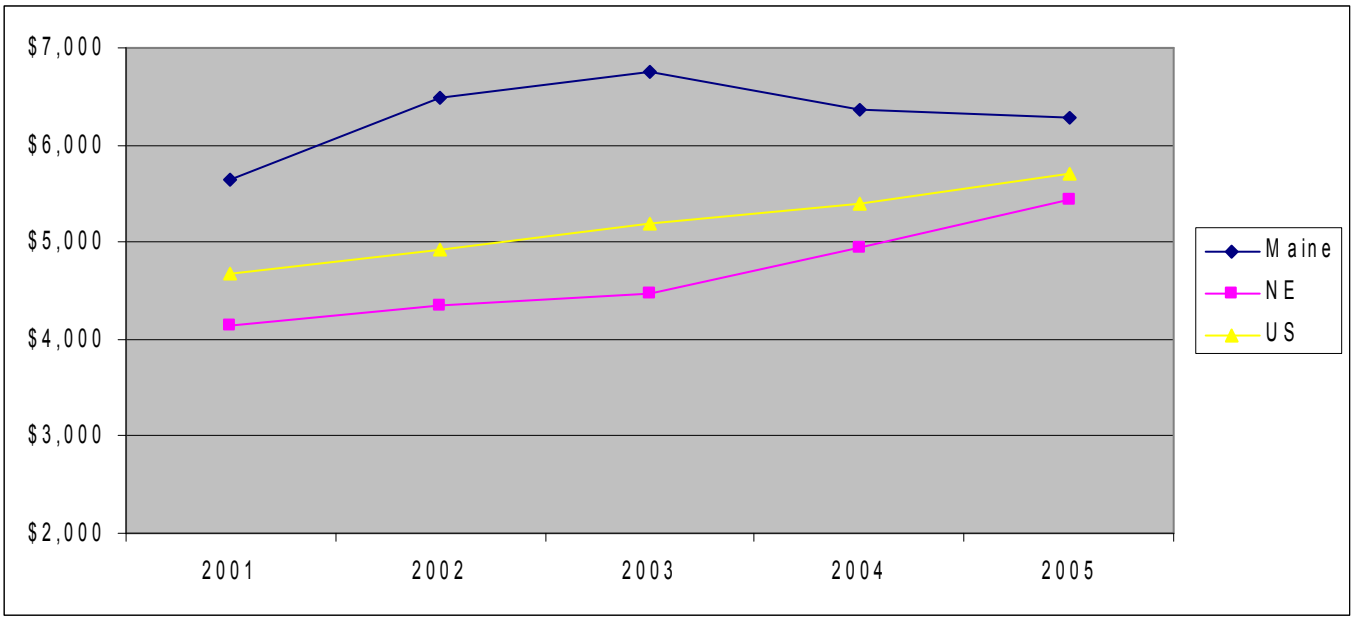
Inpatient findings

- Figure 1 shows median cost per case-mix adjusted inpatient discharge as reported by hospitals in Maine, nationally, and in the Northeast to Ingenix, a national hospital financial company.
- Maine's costs per unit appear to be higher than both US and Northeastern hospitals.

Caveat

- Ingenix adjusts the data using the "wage index" that Medicare uses as a basis to adjust payment to hospitals in different geographic areas. However, Maine hospital representatives have indicated that Medicare's wage index for Maine hospitals is too low, which results in Maine's cost per discharge appearing higher. A 2001 study done by Baker, Newman & Noyes for the Maine Hospital Association found that in 1999 Medicare paid Maine hospitals only 88% of the cost of caring for Medicare patients, although the study did not estimate the extent to which that shortfall was attributable to the wage index.

Median cost per case-mix and wage-index adjusted inpatient discharge; ME, US, NE



Source: Ingenix Almanac of Hospital Financial and Operating Indicators

Provider Charges and Costs

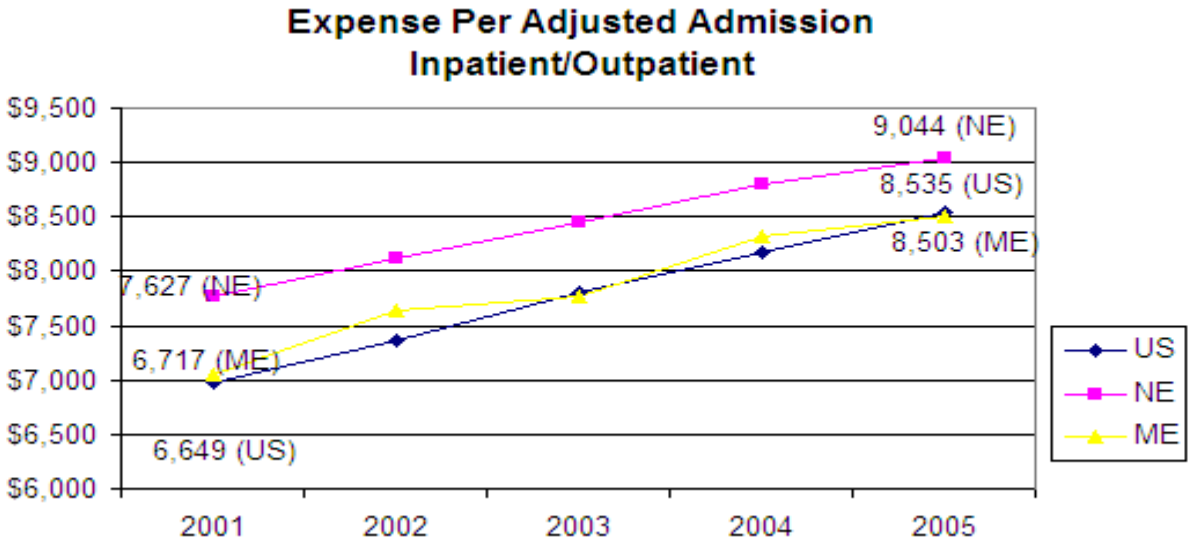
An inpatient only measure, though, presents only a partial picture of a hospital's efficiency, since its efficiency delivering outpatient services – which account for an increasing share of hospital services each year (from 38% in 1999 to 50% in 2005 in Maine) – could differ from its inpatient efficiency. A problem is that until recently, on the outpatient side there was no standardized way to define a unit or to adjust for severity. Below are several ways this issue of measuring a hospital's overall efficiency has been addressed.

Cost per discharge with adjustment for outpatient activity

Methodology. For a number of years, a way to address the lack of a standardized outpatient unit in defining overall hospital efficiency has been to start with costs per inpatient discharge and then adjust using outpatient charges as a way to approximate outpatient volume.

Finding. Figure 2 shows that using American Hospital Association survey data, Maine's hospitals' cost per unit appear to be slightly higher than US hospitals, but significantly lower than New England hospitals.

Caveat. The adjustment for outpatient activity is done using outpatient charges. It is widely agreed upon that using charges is problematic, since the difference between charges and underlying costs varies from hospital to hospital -- and can even change for one hospital from one year to the next -- making apples to apples comparisons impossible. Also, this measure does not adjust for severity (relative illness and complexity).



Source: AHA Hospital Statistics

Provider Charges and Costs

Cost per outpatient unit using recently developed Medicare system

Methodology. In August 2000 Medicare began using to a new system known as Ambulatory Patient Classifications, or APCs, to define an outpatient visit and adjust for severity, similar to using DRGs on the inpatient side.

Finding. The first two columns of figure 3 shows the median cost in 2004 of treating a Medicare inpatient encounter in Maine, Massachusetts, New Hampshire, and Vermont, both before and after adjustments for the wage-index.

Caveat. This is Medicare – rather than all-payor data. However, some argue that how efficiently a hospital treats Medicare patients approximates how efficiently hospital treats other patients too, because Medicare's payment system provides an incentive to be efficient: the hospital can keep any difference between its costs and what Medicare pays.

Cleverley Cost Index

Methodology. Cleverley and Associates, a company that consults with hospitals nationally on improving hospital financial performance, has created a hospital cost index designed to allow a comparison of hospitals'' efficiency using a single measure that is based on a hospital's: (1) cost per case-mix adjusted discharge, (2) cost per APC-adjusted outpatient encounter, and (3) inpatient/outpatient mix.

Finding. Most hospitals in Maine, New Hampshire, Massachusetts and Vermont have a score greater than 100, which means that according to Cleverley's measure they are less efficient than the national average (Cleverley defines a score of 100 as the national average). The last column of figure 4 shows that the median index in Maine in 2004 was higher than in New Hampshire and Massachusetts and slightly lower than in Vermont.

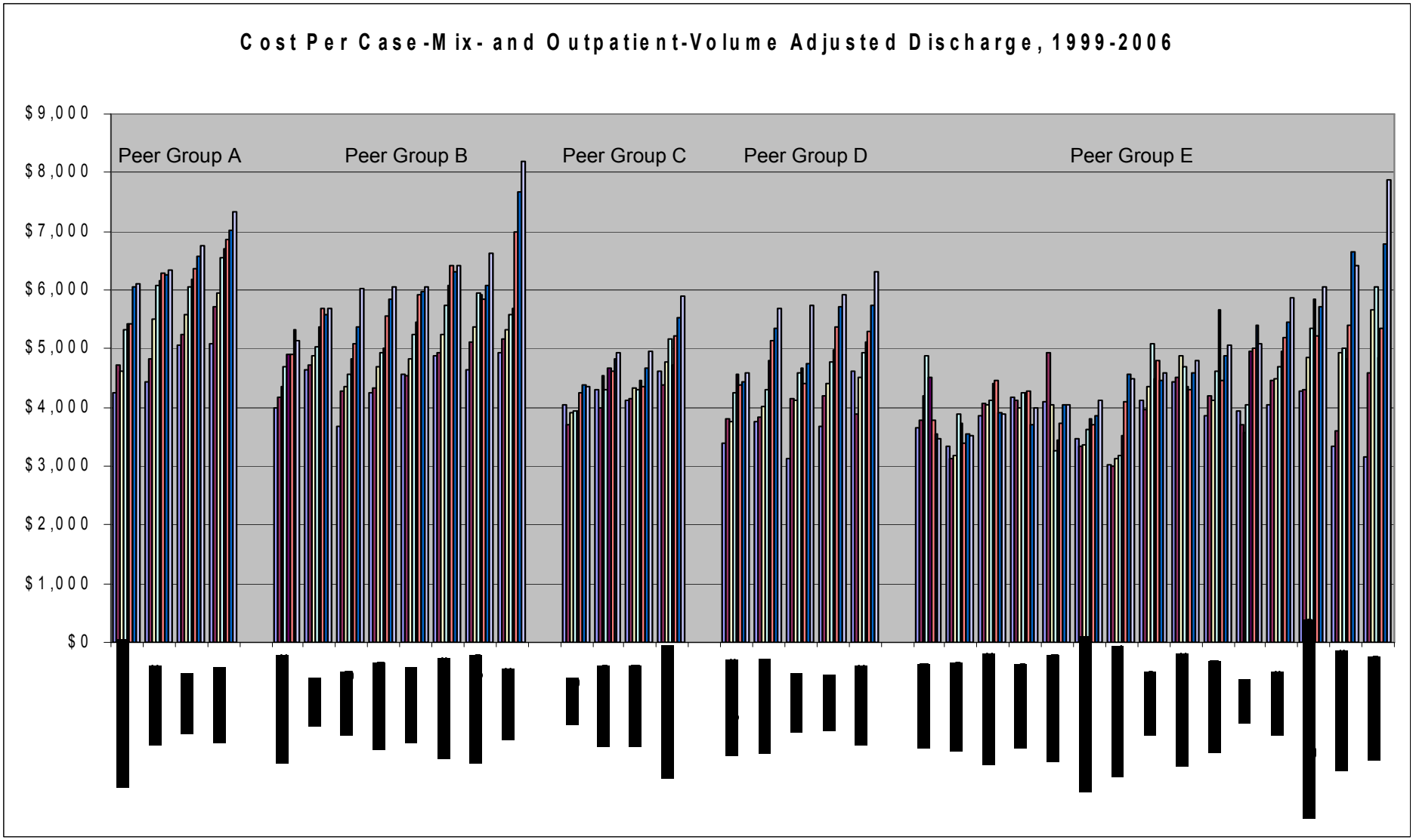
Caveat. Same comment as above regarding use of Medicare data. Also, the numbers below are based on costs after adjusting by the Medicare wage-index, which as discussed above, could result in Maine's costs appearing higher relative to other New England states. Cleverley and Associates has indicated that it can re-run the indices on pre-wage-index-adjusted costs.

Figure 3

	avg cost per APC, pre wage adjustment, 2004	avg cost per APC, post wage adjustment, 2004	cost index, post wage adjustment, 2004
ME - median	$89.57	$90.99	119.4
NH - median	$96.34	$91.33	116.8
VT - median	$102.82	$104.08	130.7
MA - median	$93.45	$84.62	105.4

Source Cleverley and Assoc.

What Does it Cost Each Maine Hospital to Care for the Average Patient



Source Schramm-Raleigh Analysis of Hospitals' Medicare Cost Report Data, Following Maine Hospital Assoc. Methodology

Cost Shifting

"Cost shifting" refers to the phenomenon of private payors' paying more than the cost of caring for their patients to cover both: (a) bad debt and charity care (BDCC) for the un- and under-insured; as well as (b) shortfalls from public payors paying less than the cost of caring for their patients (e.g., for instance, as noted on page 27, the MHA estimated that in 1999 Medicare paid only 88% of the cost of caring for Medicare patients).

Data on the extent of any cost shift from Medicare and Medicaid is not available for Maine and most states.

Pending any further analysis, the next page presents payor mix at each hospital -- sorted with hospitals with a higher proportion of private pay first -- as well as BDCC as a percent of charges. The page after that shows statewide BDCC from 1999-2005 and the page after that shows hospitals' free care policies, which impact the amount of charity care provided.

Bad Debt and Charity Care & Total Gross Revenue % By Payor 2005

	Medicare	Medicaid	Self Pay	Other	Total	Bad Debt	Charity Care	BD+CC
Mid Coast Hospital	39%	9%	6%	47%	100%	1.5%	0.8%	2.3%
York Hospital	45%	5%	6%	44%	100%	2.0%	1.6%	3.6%
Mercy Hospital	41%	13%	3%	44%	100%	2.1%	1.7%	3.8%
Parkview Adventist Medical Center	39%	14%	4%	44%	100%	1.9%	1.0%	3.0%
C. A. Dean Memorial Hospital	36%	14%	7%	43%	100%	3.9%	1.0%	4.9%
Maine Medical Center	38%	15%	6%	42%	100%	3.2%	1.3%	4.5%
Waldo County General Hospital	39%	16%	4%	42%	100%	2.3%	0.4%	2.7%
Central Maine Medical Center	40%	14%	5%	41%	100%	1.9%	1.1%	3.0%
MaineGeneral Medical Center	42%	15%	3%	40%	100%	3.0%	1.2%	4.2%
Bridgton Hospital	41%	14%	5%	40%	100%	3.7%	1.5%	5.2%
Mount Desert Island Hospital	47%	9%	6%	39%	100%	2.7%	1.9%	4.6%
Southern Maine Medical Center	46%	12%	4%	38%	100%	1.9%	1.5%	3.5%
Maine Coast Memorial Hospital	46%	13%	4%	37%	100%	2.5%	2.3%	4.8%
St. Andrews Hospital	51%	8%	4%	37%	100%	1.0%	1.1%	2.1%
St. Mary's Regional Medical Center	42%	19%	3%	36%	100%	1.9%	1.3%	3.2%
Penobscot Bay Medical Center	49%	10%	5%	36%	100%	2.2%	0.2%	2.4%
Rumford Hospital	42%	18%	4%	36%	100%	2.5%	0.6%	3.1%
The Aroostook Medical Center	44%	17%	4%	36%	100%	2.1%	0.7%	2.8%
Inland Hospital	42%	19%	3%	35%	100%	2.6%	1.1%	3.7%
St. Joseph Hospital	51%	9%	4%	35%	100%	3.1%	0.4%	3.5%
Blue Hill Memorial Hospital	48%	13%	5%	35%	100%	3.4%	0.7%	4.1%
Goodall Hospital	41%	18%	7%	34%	100%	4.1%	0.4%	4.5%
Miles Memorial Hospital	49%	12%	5%	34%	100%	3.0%	1.0%	4.0%
Stephens Memorial Hospital	46%	17%	4%	34%	100%	2.4%	1.6%	4.0%
Eastern Maine Medical Center	41%	18%	8%	33%	100%	2.3%	1.6%	3.9%
Northern Maine Medical Center	53%	13%	2%	33%	100%	0.6%	0.9%	1.5%
Calais Regional Hospital	46%	19%	3%	33%	100%	1.9%	0.6%	2.5%
Franklin Memorial Hospital	47%	17%	5%	32%	100%	3.1%	1.1%	4.2%
Mayo Regional Hospital	47%	17%	5%	31%	100%	2.1%	1.5%	3.7%
Millinocket Regional Hospital	54%	11%	4%	30%	100%	1.1%	2.8%	3.9%
Down East Community Hospital	44%	23%	5%	28%	100%	2.5%	1.1%	3.6%
Sebasticook Valley Hospital	47%	20%	5%	28%	100%	2.4%	2.1%	4.5%
Houlton Regional Hospital	47%	20%	6%	27%	100%	1.8%	0.8%	2.7%
Penobscot Valley Hospital	47%	21%	5%	27%	100%	2.9%	1.7%	4.6%
Redington-Fairview General Hospital	53%	17%	4%	25%	100%	3.6%	0.6%	4.3%
Cary Medical Center	52%	17%	12%	19%	100%	1.9%	1.1%	3.0%
State Total	**43%**	**15%**	**5%**	**37%**	**100%**	**2.5%**	**1.2%**	**3.7%**

Sources. (1) Payor Mix - Maine Hospital Association. (2) Bad Debt and Charity Care - hospital financial filings with the MHDO.

Care & Total Gross Revenue % By Payor 2005

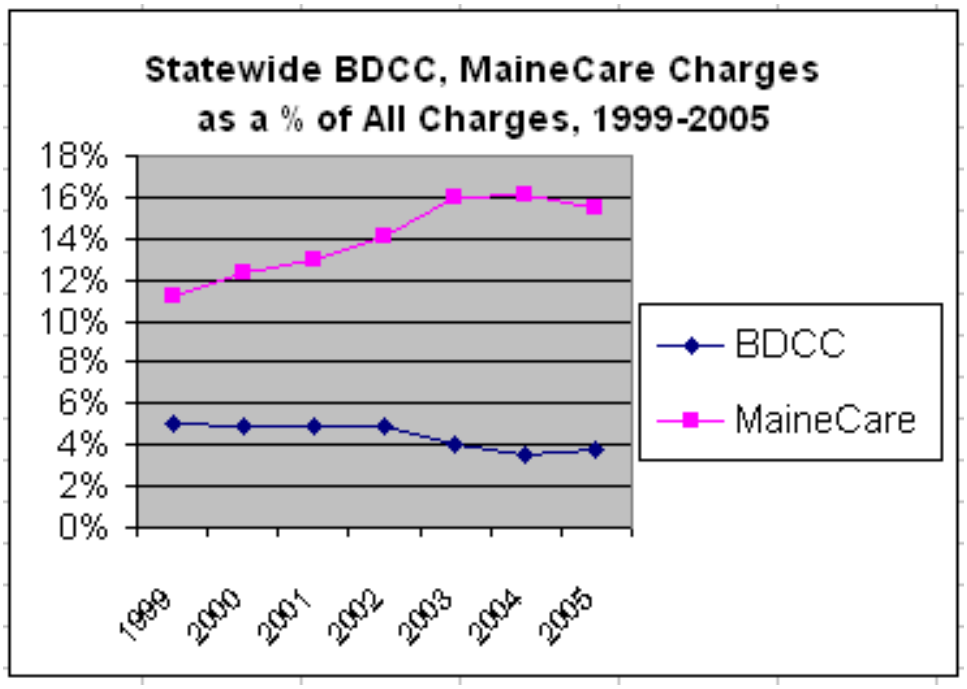
This page shows payor mix broken out by different categories of hospitals.

	Medicare	Medicaid	Self Pay	Other	Total
0 - 55 BEDS	46%	16%	4%	34%	100%
56 - 110 BEDS	44%	15%	4%	36%	100%
111 - 324 BEDS	43%	14%	4%	40%	100%
325+ BEDS	39%	16%	7%	38%	100%
CENTRAL	44%	14%	3%	40%	100%
EASTERN	44%	16%	6%	34%	100%
NORTHERN	45%	27%	4%	24%	100%
SOUTHERN	40%	13%	5%	42%	100%
WESTERN	42%	16%	4%	37%	100%
RURAL	45%	17%	4%	34%	100%
URBAN	41%	14%	5%	39%	100%
TEACHING	40%	15%	6%	39%	100%
NON TEACHING	45%	16%	4%	35%	100%
CAH	47%	16%	4%	33%	100%
NON CAH	42%	15%	5%	38%	100%
SCH	47%	13%	4%	35%	100%
NON SCH	42%	15%	5%	38%	100%

Source - Maine Hospital Association

Bad Debt and Charity Care

Statewide BDCC as a % of all charges – a measure which places BDCC in the context of total business – has decreased since the late 1990's: it was 5% of charges ($120 mil out of $2.4 billion in total business) in 1999 versus 3.8% of charges ($183 mil out of $4.9 billion in total business) in 2005 (see lower line on chart below). As seen earlier, there is variation hospital to hospital -- some provide more, some provide less.



Sources: (1) MaineCare: Maine Health Data Organization. (2) BDCC: Hospital audited financial statements.

While the American Hospital Association reports that nationwide BDCC as a % of total expenses has been around 5.5% from 2001 to 2005, this is not an apples to apples comparison with Maine hospitals, because BDCC as a % of charges varies significantly by type of hospital (e.g., teaching vs non-teaching, private vs public), there is no data source to compare BDCC at Maine's small non-profit, non-teaching hospitals to similar hospitals in other states.

At the same time as the MaineCare expansions: (1) many hospitals voluntarily increased their charity care eligibility thresholds (see next page); and (2) More and more people have high-deductible plans, which leaves people with more out-of-pocket expenses. A 2004 survey found that approximately 30% of hospital bad debt is from people with insurance. These two factors would tend to increase BDCC.

Maine Hospital's Charity Care Policies

State law requires hospitals to provide free care to people up to 100% of the federal poverty level. All but two hospitals have voluntarily extended their policies to more people. Twenty-eight hospitals voluntarily increased their charity care policies between September 2003 and December 2005. Six hospitals increased their policies between December 2005 and March 2007.

	Sep-03	Dec-05	Mar-07
median	113%	200%	200%
average	130%	184%	188%
Increase from Sep 03 to Dec 05			
Blue Hill Memorial Hospital	100%	200%	200%
Bridgton Hospital	150%	200%	200%
C.A. Dean Memorial Hospital	100%	200%	200%
Calais Regional Hospital	100%	125%	150%
Cary Medical Center	100%	200%	200%
Central Maine Medical Center	150%	200%	200%
Down East Community Hospital	100%	200%	200%
Franklin Memorial Hospital	100%	250%	???
Houlton Regional Hospital	100%	150%	150%
Inland Hospital	175%	200%	200%
Mercy Hospital	150%	200%	200%
Mid Coast Hospital	100%	150%	150%
Miles Memorial Hospital	150%	200%	200%
Millinocket Regional Hospital	100%	150%	150%
Northern Maine Medical Center	150%	200%	200%
Penobscot Bay Medical Center	100%	200%	200%
Penobscot Valley Hospital	125%	200%	200%
Redington-Fairview General Hospital	100%	140%	150%
Rumford Hospital	150%	200%	200%
Sebasticook Valley Hospital	150%	200%	200%
Southern Maine Medical Center	100%	200%	200%
St. Andrews Hospital & Healthcare Center	150%	200%	200%
St. Joseph Hospital	100%	200%	200%
St. Mary's Regional Medical Center	100%	200%	200%
Stephens Memorial Hospital	150%	175%	175%
The Aroostook Medical Center	100%	200%	200%
Waldo County General Hospital	100%	200%	200%
York Hospital	200%	250%	250%
No Change from Sep 03 to Dec 05			
Eastern Maine Medical Center	200%	200%	200%
Goodall Hospital	150%	150%	200%
Maine Coast Memorial Hospital	100%	100%	150%
Maine General	175%	175%	175%
Maine Medical Center	175%	175%	175%
Mayo Regional Hospital	125%	125%	150%
Mount Desert Island Hospital	100%	100%	150%
Parkview Adventist Medical Center	200%	200%	200%

*Free Care is available to people up to this percentage of the Federal Poverty Level (in 2006, $9800 for an individual).

Sources:Mar 2007: Posting at Maine Hospital Association web-site, Dec 2005: MHA handout given to the legislature's Health and Human Services Committee during the 2006 legislative session, Sep 2003: hospital responses to survey by Consumers for Affordable Health Care

Utilization

As mentioned earlier, according to Dr. David Wennberg of the Dartmouth Atlas, 25% of the variation between market areas' health care spending is accounted for by differences in cost-per unit, while 75% is accounted for by the number of units consumed.

The data on the next several pages comes from Kaiser's "State Health Facts Online", (www.statehealthfacts.kff.org) a web-page where Kaiser posts health care data on multiple topics from multiple sources.

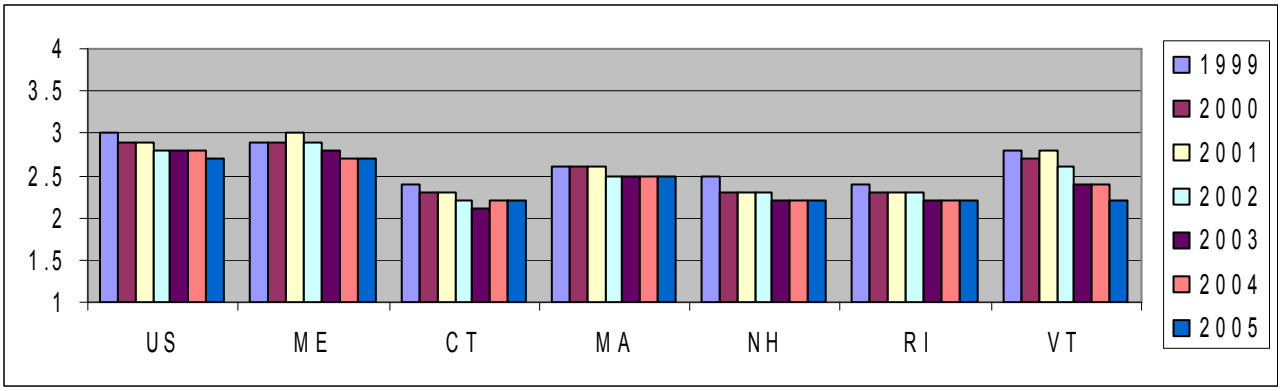
This specific data is from the "providers and service use" part of the web-site and displays multiple years of data from an annual survey done by the American Hospital Association.

Changes in Utilization - Inpatient

The data below show that the number of beds per 1000 population has been declining nationally and across New England as a shift from the inpatient to outpatient setting has occurred. It also shows that Maine's beds per 1000 rate is consistent with the national number, but higher than New England numbers.

Hospital Beds per 1,000 Population, 1999-2005

	1999	2000	2001	2002	2003	2004	2005	99-05 chg
US	3	2.9	2.9	2.8	2.8	2.8	2.7	-10.0%
ME	2.9	2.9	3	2.9	2.8	2.7	2.7	-6.9%
CT	2.4	2.3	2.3	2.2	2.1	2.2	2.2	-8.3%
MA	2.6	2.6	2.6	2.5	2.5	2.5	2.5	-3.8%
NH	2.5	2.3	2.3	2.3	2.2	2.2	2.2	-12.0%
RI	2.4	2.3	2.3	2.3	2.2	2.2	2.2	-8.3%
VT	2.8	2.7	2.8	2.6	2.4	2.4	2.2	-21.4%



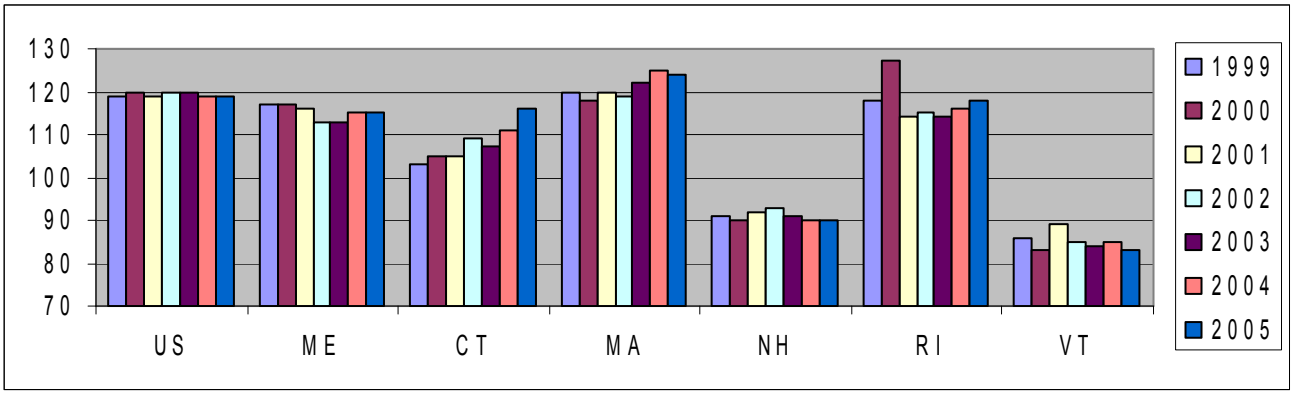
Source: www.statehealthfacts.kff.org

Changes in Utilization - Inpatient

This chart shows that inpatient admissions have been relatively flat nationally and in all but two New England states.

Admissions per 1,000 Population, 1999-2005

	1999	2000	2001	2002	2003	2004	2005	99-05 chg
US	119	120	119	120	120	119	119	0.0%
ME	117	117	116	113	113	115	115	-1.7%
CT	103	105	105	109	107	111	116	12.6%
MA	120	118	120	119	122	125	124	3.3%
NH	91	90	92	93	91	90	90	-1.1%
RI	118	127	114	115	114	116	118	0.0%
VT	86	83	89	85	84	85	83	-3.5%



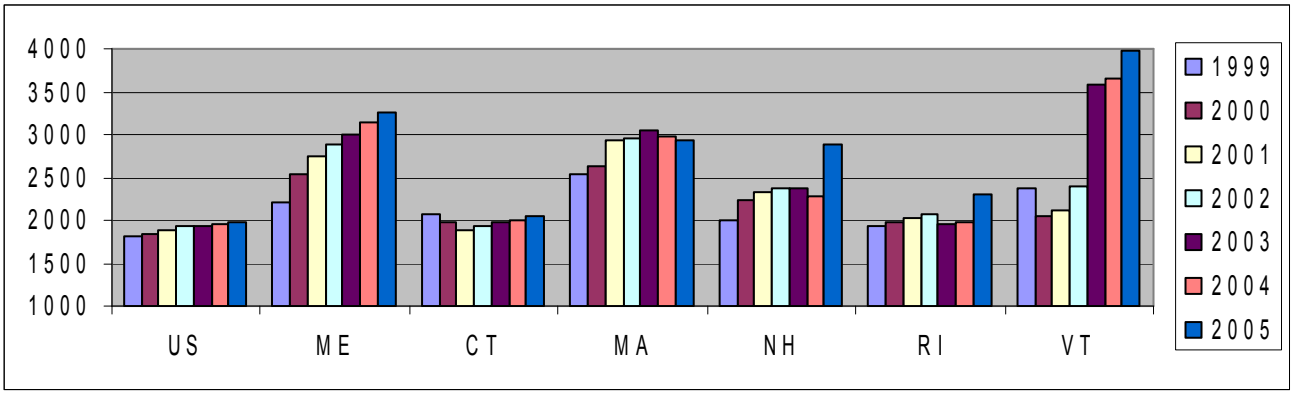
Source: www.statehealthfacts.kff.org

Changes in Utilization - Outpatient

This chart shows that outpatient visits have been increasing nationally and in New England.

Outpatient Visits per 1,000 Population, 1999-2005

	1999	2000	2001	2002	2003	2004	2005	99-05 chg
US	1817	1848	1889	1932	1937	1946	1971	8.5%
ME	2217	2543	2734	2882	2998	3131	3262	47.1%
CT	2077	1974	1891	1920	1968	2002	2041	-1.7%
MA	2544	2627	2934	2962	3058	2971	2932	15.3%
NH	1999	2228	2327	2372	2383	2284	2894	44.8%
RI	1929	1981	2031	2071	1962	1985	2313	19.9%
VT	2381	2038	2107	2386	3571	3661	3979	67.1%



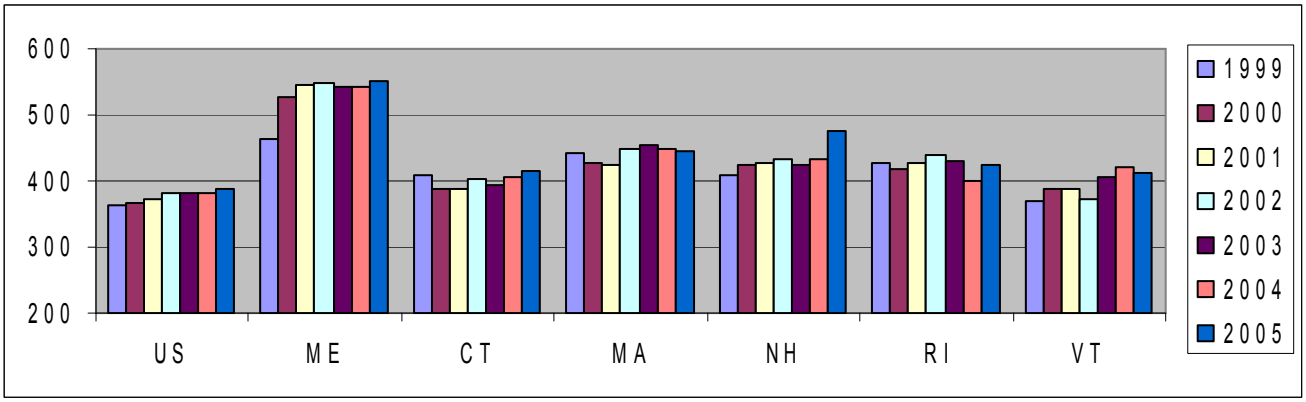
Source: www.statehealthfacts.kff.org

Changes in Utilization - Emergency Department

This chart shows that Maine's rate of ED use is significantly higher than the US and New England rates.

Emergency Department Visits per 1,000 Population,

	1999	2000	2001	2002	2003	2004	2005	99-05 chg
US	365	366	372	382	382	383	387	6.0%
ME	463	528	545	548	542	541	553	19.4%
CT	410	388	387	403	393	406	415	1.2%
MA	441	427	425	449	456	449	446	1.1%
NH	409	424	427	432	425	434	475	16.1%
RI	426	419	426	439	431	400	424	-0.5%
VT	371	387	388	374	406	421	412	11.1%



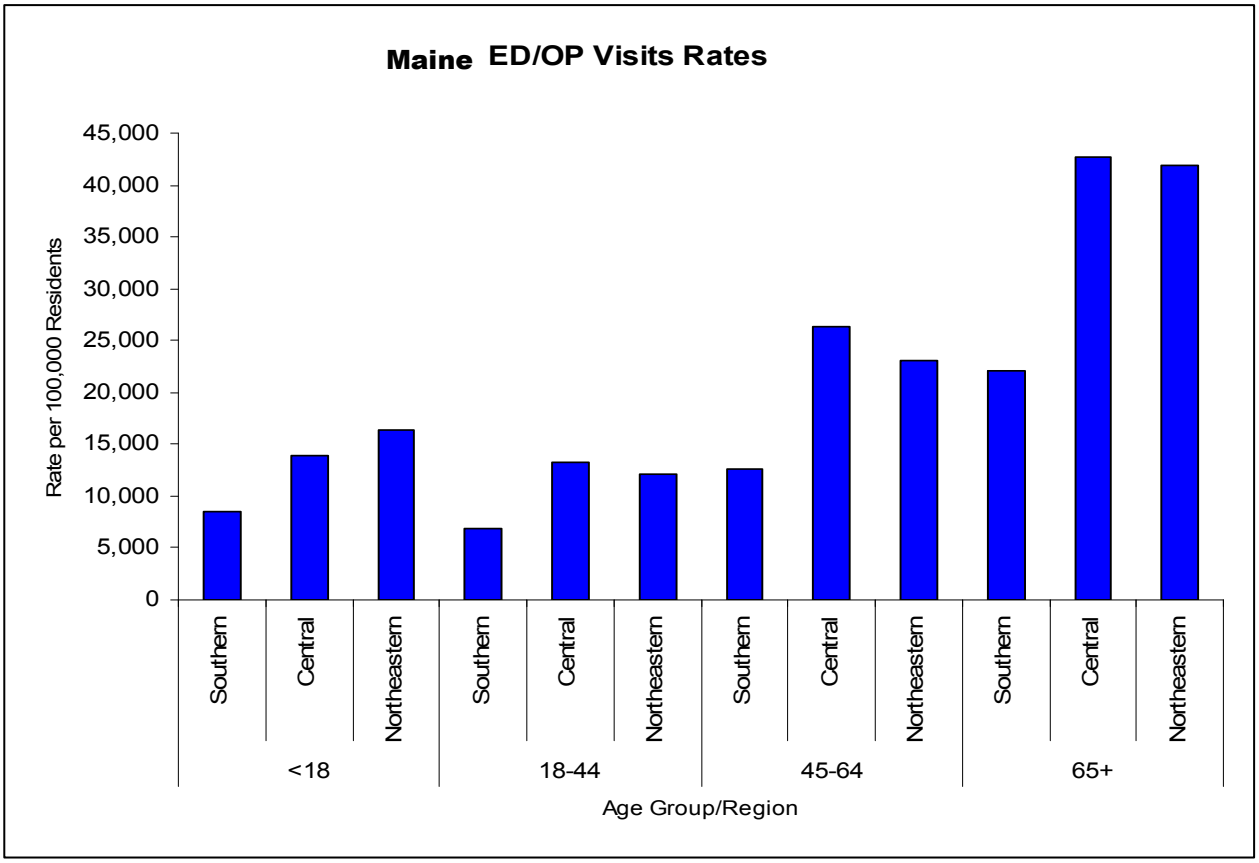
Source: www.statehealthfacts.kff.org

Utilization - Emergency Department

It is unclear exactly why Maine's emergency department use is so high, but there are a number of factors that could contribute.

Maine has one of the lowest rates of uninsured in the country, so that does not explain the difference between Maine and the US, although areas of Maine with higher rates of uninsured (see chart at top right of next page) do have higher rates of ED use (see below)

Also, it is not necessarily a lack of primary care doctors that is driving our high ED use when compared to the US: The next page shows that only six other states have more primary care doctors per 100,000 than Maine. However, there could be a maldistribution of primary care doctors within Maine: the south has more primary care doctors and has a lower rate of ED use compared to rest of state (see chart at lower right of next page), so supply of primary care primary care doctors could explain some of the variation within Maine.

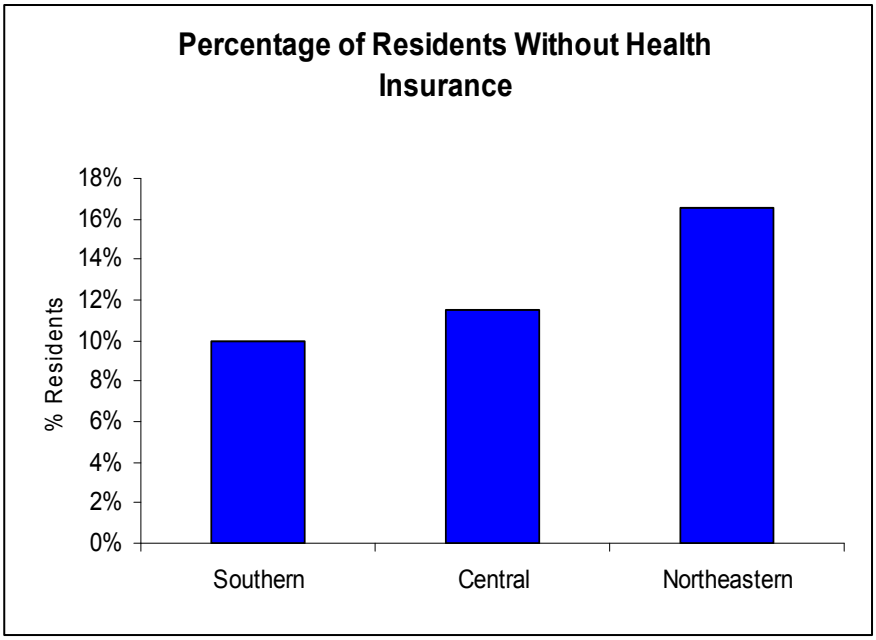


Source: Maine Health Data Organization, UHDDS, 2002

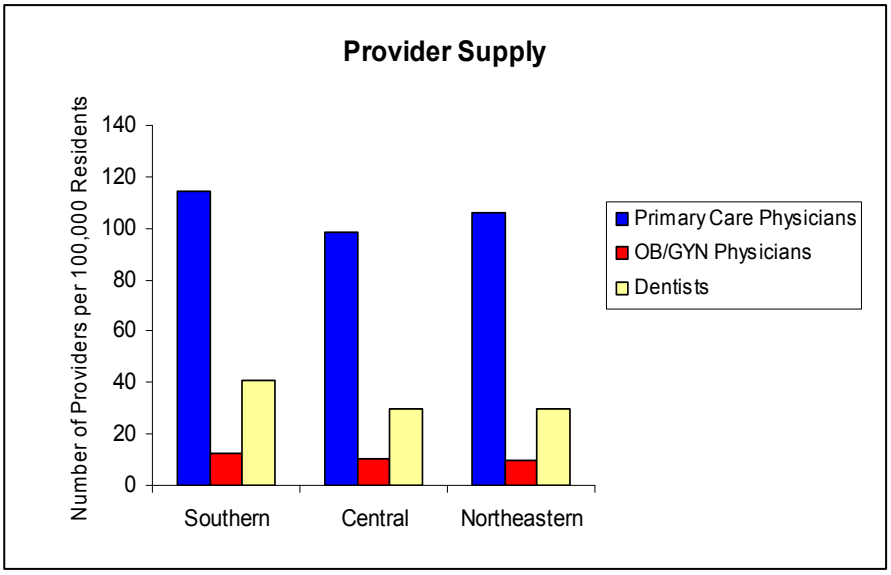
Possible Factors Influencing Emergency Department Use

primary care doctors per 100,000, 2006

United States	**124.2**
District of Columbia	277.4
Massachusetts	**173.9**
New York	173.4
Vermont	**173.1**
Rhode Island	**165.2**
Maryland	158.1
Connecticut	**156.5**
Maine	**154.3**
New Jersey	150.8
Hawaii	146.7
Pennsylvania	145.0
Minnesota	135.2
Michigan	133.0
Illinois	132.5
Oregon	131.3
Ohio	129.1
New Hampshire	**128.3**
Washington	126.9
West Virginia	126.5
Wisconsin	122.9
North Dakota	122.8
California	121.7
Colorado	121.5
Virginia	121.4
Delaware	121.4
Nebraska	118.4
Tennessee	117.6
Florida	115.3
Kansas	115.2
Alaska	115.1
Missouri	114.5
Louisiana	114.0
New Mexico	113.6
South Dakota	112.5
Montana	111.9
North Carolina	111.1
Iowa	110.2
South Carolina	106.1
Kentucky	104.2
Arizona	102.9
Indiana	101.6
Georgia	99.6
Oklahoma	99.1
Wyoming	98.6
Arkansas	98.6
Alabama	98.3
Texas	94.2
Utah	93.0
Nevada	92.3
Idaho	88.0
Mississippi	85.2



Source: BRFSS data set, 2002-2003



Source: Maine Department of Health & Human Services, 2002

Source: physician data at left from www.statehealthfacts.kff.org, using American Medical Association, Physicians Professional Data, year of data 2006, copyright 2006: Special Data Request; population data from US Census Bureau

Utilization - Large Employers

The data on the previous pages looked at utilization for Maine's population as a whole.

Now we look at how utilization varies using data from two distinct sub-populations -- (1) people covered by large employers, and (2) Medicare patients.

In 2005, the Muskie School and the Maine Health Information Center conducted an analysis of proprietary claims data from Maine Health Management Coalition, a coalition of large Maine employers working together to lower health care costs. The Coalition covers about 200,000 Maine residents, or 25% of the privately insured population. The study included claims data for 106,000 lives and covered the years from 1995-2001. (While this data is old, there is some overlap with data from the previous pages, and the study could be updated using the MHDO all-payor claims database to provide more recent data and for the entire population.)

The findings were consistent with data presented previously:

- Inpatient discharges dropped 12% and inpatient days dropped 6%, while total amount paid for inpatient increased 20% from 1995-2001.
- Outpatient spending per member per month almost doubled, increasing 92% over the same period.
- The rate of CAT scans and MRIs per 1,000 increased by 143% and 149%, respectively. These procedures are performed in both the inpatient and outpatient settings and have been identified in national studies (e.g., McKinsey) as significant cost drivers.

Utilization - The Medicare Population

Dartmouth researchers developed a method of determining population-based rates for the utilization and distribution of health-care services. This revealed large variations in health care usage among different areas. Work to uncover the reasons behind these variations led Wennberg and his colleagues to develop techniques to document the results of common medical practices, a strategy that came to be called outcomes research.

Dartmouth applies these techniques using Medicare data because (1) the data is available for all 50 states, (2) characteristics of the Medicare population are similar across states, so state to state differences in utilization are less likely to be driven by differences in age and health status (as is the case when comparing privately insured populations across states). Additionally, www.dartmouthatlas.org/faq/hospital.shtm says "We use statistical adjustments to capture the degree to which things associated with illness - the age, sex, and race composition of the population - predict differences in illness rates."

Data on the next page shows that Maine's Medicare population uses fewer inpatient hospital services than the national average. The Dartmouth web-site does not provide outpatient data.

The appendix contains an article from the New York Times describing Dartmouth's work for those interested in more information.

DARTMOUTH DATA -
HOSPITAL DISCHARGES PER 1000

	Rank	Variation from Maine	All Hospital Discharges per 1,000 Medicare Enrollees (2003)
National Average		-7%	**347.37**
Hawaii	1	52%	155.8
Utah	2	21%	256.31
Washington	3	20%	259.74
Vermont	4	17%	269.18
New Hampshire	5	15%	275.37
Oregon	6	14%	279.62
New Mexico	7	14%	279.9
Idaho	8	12%	287.85
Nevada	9	11%	288.33
Alaska	10	11%	289.61
Colorado	11	10%	293.94
Connecticut	12	9%	297.56
Arizona	13	7%	302.9
California	14	6%	305.22
North Dakota	15	3%	314.35
Wisconsin	16	3%	316.69
Rhode Island	17	2%	317.99
Iowa	18	0%	323.84
Wyoming	19	0%	324.21
Maine	20	0%	**325.38**
Nebraska	21	0%	325.42
Delaware	22	-1%	328.32
Minnesota	23	-1%	329.81
Virginia	24	-1%	329.95
Montana	25	-2%	332.54
Indiana	26	-2%	332.93
New York	27	-3%	335.88
South Dakota	28	-5%	343.18
Florida	29	-6%	345.82
Massachusetts	30	-7%	347.72
North Carolina	31	-7%	347.79
Georgia	32	-8%	350.28
Michigan	33	-8%	351.75
South Carolina	34	-9%	355.82
Kansas	35	-12%	363.69
New Jersey	36	-12%	363.98
Texas	37	-12%	365.68
Maryland	38	-12%	365.98
Ohio	39	-13%	366.4
Pennsylvania	40	-14%	371.58
Tennessee	41	-16%	378.87
Missouri	42	-16%	378.91
Illinois	43	-18%	384.26
Arkansas	44	-19%	386.33
Oklahoma	45	-23%	399.84
Mississippi	46	-26%	409.66
Kentucky	47	-29%	419.33
Louisiana	48	-30%	422.16
Alabama	49	-31%	425.99
West Virginia	50	-36%	441.86

Utilization Drivers

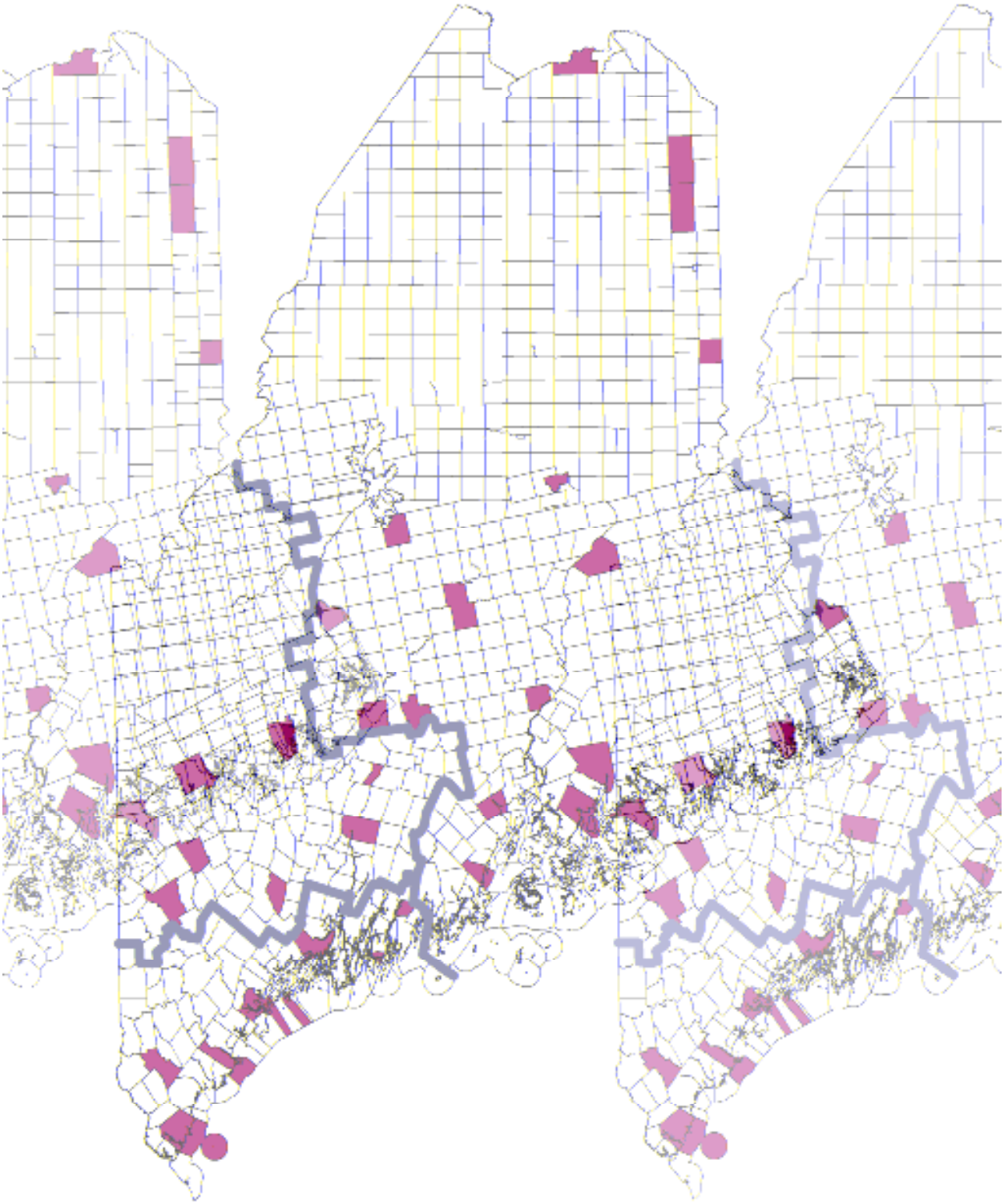
As identified by McKinsey and others, supply and health status are both key drivers of utilization.

We deal first with supply.

As noted earlier, Maine's beds per 1000 rate is consistent with the national number, but higher than New England numbers.

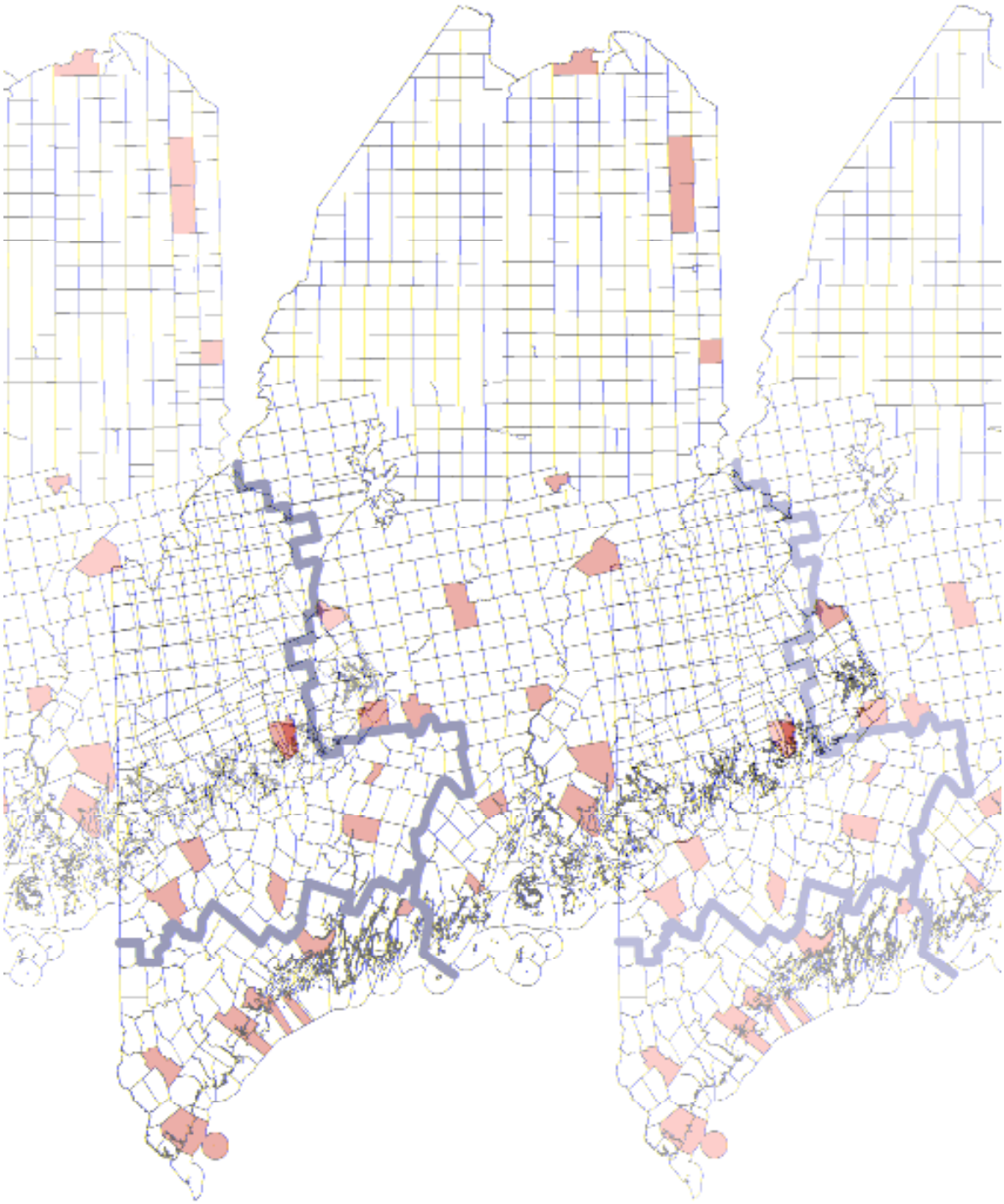
Location of Maine Hospitals

Note: the darkened areas on this map indicate towns where one or more hospitals are located



MRI Service Availability by Town

This map indicates the towns where MRI services are available. It does not indicate the number of MRI machines in Maine

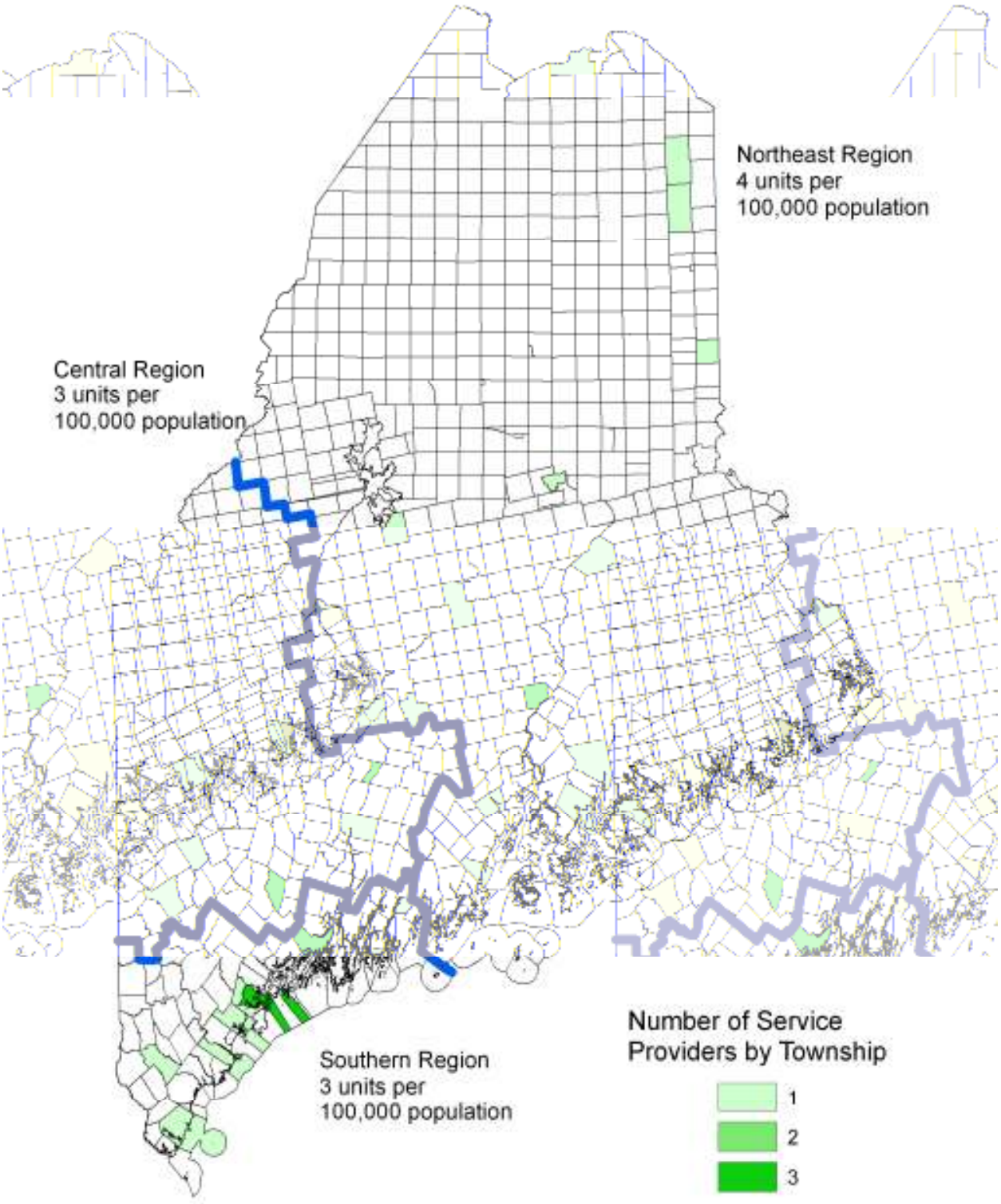


A nationally conducted study published in 2003* found that Maine's capacity in terms of MRI units is among the highest in the country - 8 times the capacity in New Hampshire, for example.

*Baker, L. Birnbaum, H., Geppert, J., et al (2003)., The Relationship Between Technology Availability and Health Care Spending. Prepared for Blue Cross and Blue Shield Association. Chicago, IL: 37.

Source: Maine Department of Health and Human Services, Oct. 29, 2007

Distribution of CT Scanners in Maine

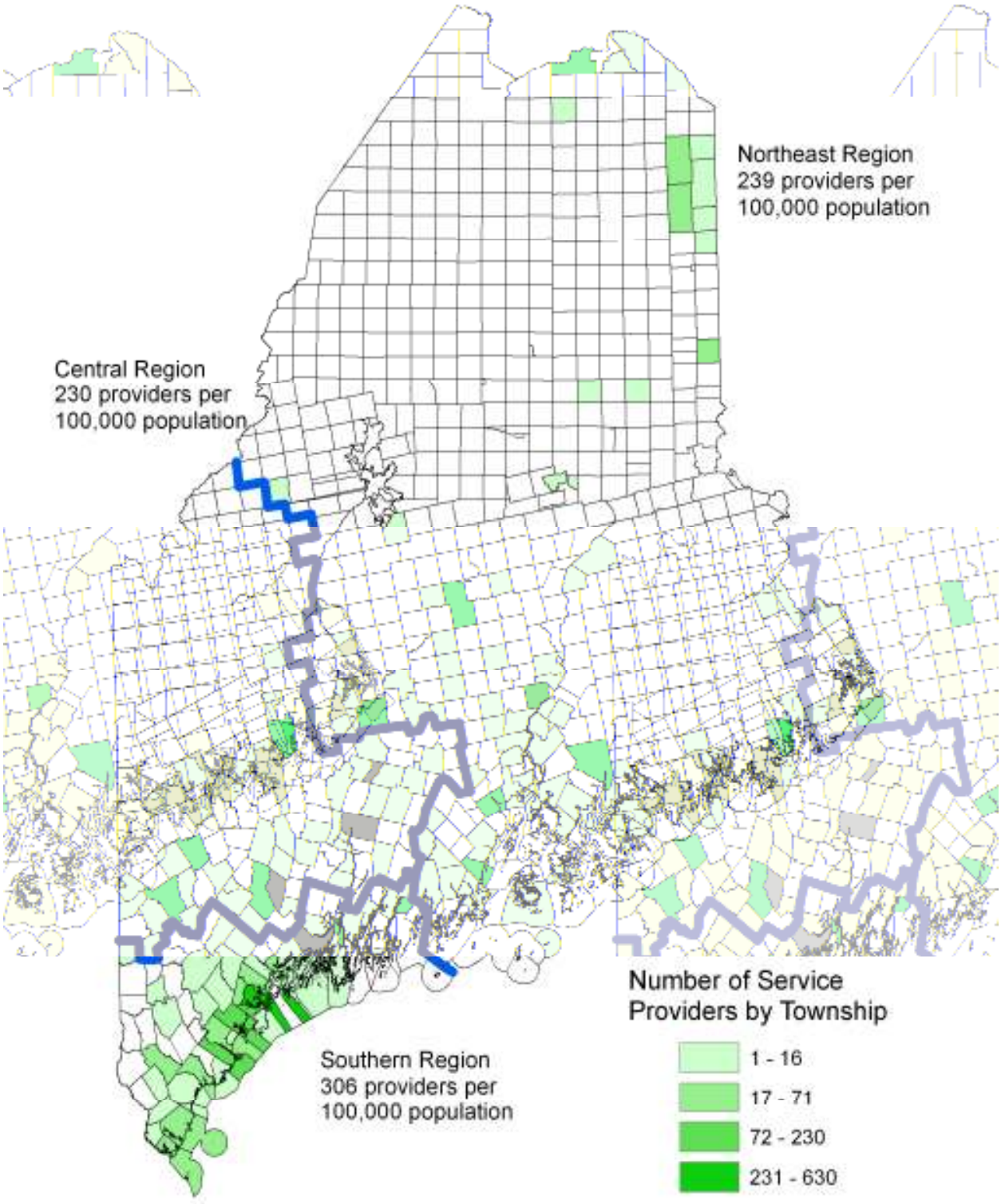


In the Muskie School / Maine Health Management Coalition analysis mentioned earlier, the rate of CAT scans per 1,000 increased by 143% from 1996-2001.

Source: Maine Department of Health and Human Services

Distribution of Physicians in Maine, 2004

Includes both allopathic and osteopathic physicians, primary care and specialists



Source: Source: Department of Professional & Financial Regulation. Licensing data count the number of individuals who hold current licenses, not the number of individuals who are actively practicing time, be that on a full or part time basis

Supply

Maine CDC has indicated that it could assist in building an inventory of what is located where, but they would need direction on what exactly to put together.

Specifically, CDC has data on what kind of x-ray equipment (i.e. mammography, CT, fluoroscopic, Digital) is located where, as well as who owns it.

CDC also licenses radioactive materials use, which means a number of additional cancer treatment modalities, or just imaging and diagnostic capabilities.

There are also some machines out there known as "Fusion imaging" which use both an x-ray device and a nuclear medicine device at the same time and develop the two different sets of data into one specific image.

CDC has told us that they could also develop enough data (they don't have it presently) to assess the number of each type of procedure done by each machine, facility, or on a population based statistic.

Health Status

Researchers have shown that 15 of the most common clinical conditions accounted for 56% of the increase in health care spending in the United States between 1987 and 2000. This research also provides a method to determine the components of that spending – how much is due to more underlying disease in the population, our growing ability to diagnose and treat disease, the growing cost of treatment and just growth in the population.

Applying this same methodology to Maine's growth in health care spending from 1998 to 2005, and adjusting for the fact that Maine's population has grown more slowly than that of the nation as a whole, it follows that $1.2 billion – nearly 37% of the $3.3 billion increase in health care spending over those 7 years – is attributable to the leading chronic illnesses: cardiovascular disease; cancer; chronic lung disease; and diabetes. Most importantly, these conditions are largely preventable.

Maine	Portion of total increase attributable to this condition		Portion of this increase attributable to:					
			Increases in the cost of treatment		Increases in the diagnosis and treatment of the condition		Increased population	
Heart disease	8.1%	$0.26	83%	$0.22	1%	$0.004	16%	$0.04
Pulmonary conditions	5.6%	$0.18	42%	$0.08	47%	$0.09	11%	$0.02
Mental disorders	7.4%	$0.24	24%	$0.06	66%	$0.16	10%	$0.02
Cancer	5.4%	$0.18	51%	$0.09	33%	$0.06	16%	$0.03
Hypertension	4.2%	$0.14	67%	$0.09	21%	$0.03	11%	$0.02
Cerebrovascular disease	3.5%	$0.12	23%	$0.03	67%	$0.08	10%	$0.01
Diabetes	2.4%	$0.08	28%	$0.02	58%	$0.04	14%	$0.01
Total	36.6%	$1.201	49%	$0.585	38%	$0.462	13%	$0.154

Thorpe KE, Florence CS, Joski P. "Which Medical Conditions Account For the Rise in Health Care Spending?" *Health Affairs Web Exclusive.* August 25, 2004. www.healthaffairs.org.

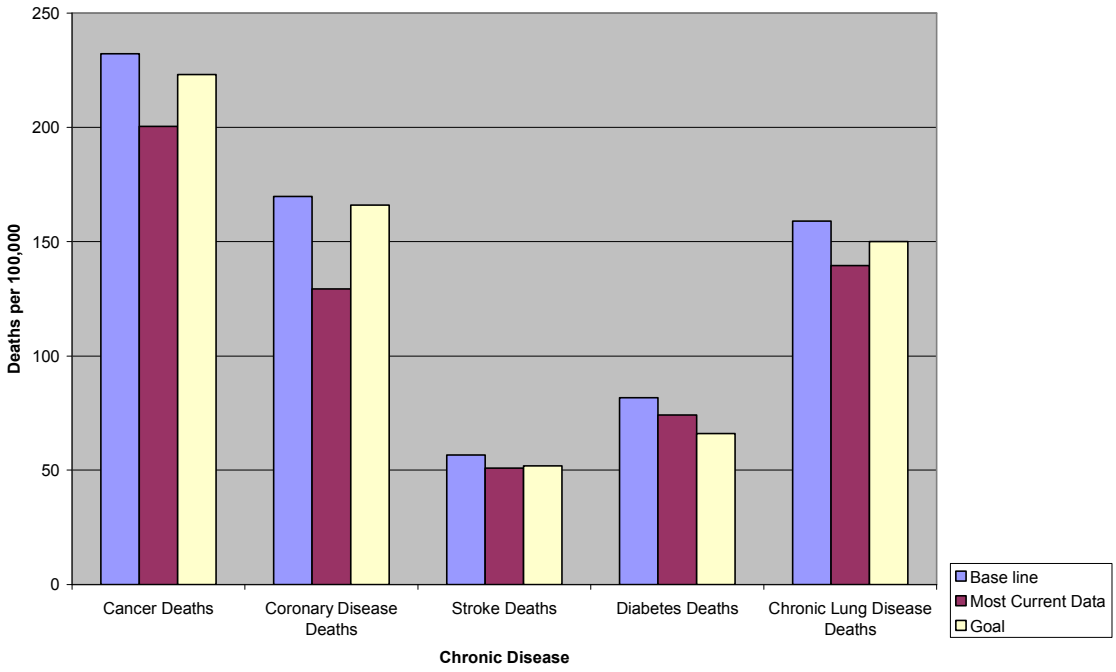
Health Status

The next two pages provide statewide data on selected health status and healthy behavior indicators tracked by the State Health Plan and Healthy Maine 2010.

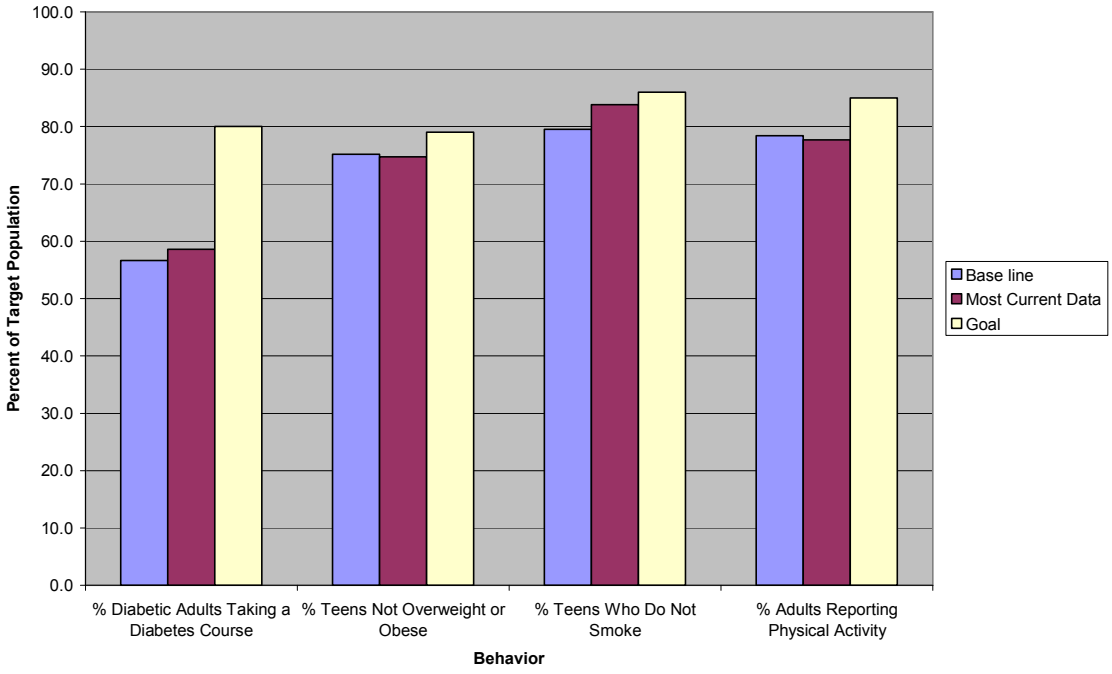
Soon, as a result of work done by the Public Health Workgroup, Maine will have public health data available for the state's eight new public health districts. Maine CDC is currently developing the data template, and in so doing is looking at a new template that the federal government is developing for county public health profiles. A draft of the federal template is included on the page after the statewide statistics.

Health Status

Progress Toward Reducing Deaths from Chronic Disease



Progress Toward Increasing Healthy Behaviors



Health Status Benchmarks

Goal	Goal Year	Most Current Data	Year of Most Current Data	Annual Actual Change	Change Needed to Achieve Goal	Pace[2]	National Rank	US Average	Benchmark State
223.1 (2008)	2008	200.5 (2004)	2003 (2003)	6.4 fewer deaths/year	**Goal Exceeded**	*****	42nd best	184.4 (2004)	139.9 Utah
85.0% (2008)		No new data		-	-	-	4th best	74.9%	82.5% Mass.
166.0 (2008)	2008	129.3 (2004)	2004	9.4 fewer deaths/year	**Goal Exceeded**	*****	13th best	157.2 (2004)	93.2 Minn.
52.0 (2008)	2008	50.9 (2004)	2004	7.9 fewer deaths/year	**Goal Exceeded**	*****	28th best	48.0 (2004)	32.6 NY
66.0 (2008)	2008	74.2[4] (2004)	2003	1.9 fewer deaths/year	3.9 fewer deaths/yr	**	18th best	70 (2004)	45.0 Ariz.
80.0% (2008)	2008	58.6% (2005)	2005	3.8% point increase/yr	9.2% point increase/yr	*	14th best	55.5% (2004)	75.7% Minn.
6.5 (2008)	2008	8.6 (2005)		.2 fewer hospitalizations/ year	.4 fewer hospitalizations/ year		NA	NA	NA
150.0 (2010)	2010	139.5 (2004)		3.3 fewer people dying from disease/	**Goal Exceeded**	*****	38th best	122.8 (2004)	94.7 NJ
79.0% (2008)	2008	74.7% (2005)		.25% increase in obese or	1.8% point increase per year	*		71.2% (2005)	
14.0% (2010)	2010	No new data		-	-	-	4th best	20.5% (2005)	7.4% Utah
85% (2008)	2008	77.7% (2006)	2006	.03% point increase/yr	.18% point increase/yr	*	11th best	76.2%	83.8% Minn.

1. All death rates are age adjusted. Rates for the US and other states are for whites only, state data excludes Washington, DC

2. * =<25% of goal; ** = 25-49%, *** = 50-74%, **** = 75-89%, ***** = 90+%

3. This figure represents the final rate provided by the CDC, rather than the preliminary rate used in the Plan.

4. These data are preliminary

5. Contains corrected State Health Plan data.

6. Comparative figures are based on 40 states

Preventive Services Use:
Infectious Diseases
AIDS (Cases, Expected)
Haemophilus influenza B (Cases, Expected)
Hep A (Cases, Expected)
Hep B (Cases, Expected)
Measles (Cases, Expected)
Pertussis (Cases, Expected)
Congential Rubella Syndrome (Cases, Expected)
Syphilus (Cases, Expected)
Tuberculosis (Cases, Expected)

Adult Preventive Services Use (%)
Pap
Mam
Sigmoidoscopy
Pneumonia vaccine
Flu Vaccine

Relative Health Importance
Your Health Status Comparison to Peers:
Unfavorable/Unfavorable
Unfavorable/favorable
Favorable/Unavorable
Favorable/Favorable

National Leading Cause of Death:
Under Age 1(white, black, other, hispanic)
Complications of Pregnancy/Birth
Birth Defects
Ages 1-14 (white, black, other, hispanic)
Injuries
Cancer
Homicide
Ages 15-24 (white, black, other, hispanic)
Injuries
Homicide
Cancer
Ages 25-44 (white, black, other, hispanic)
Injuries
Cancer
Suicide
Heart Disease
HIV/AIDS
Homicide
Ages 45-65 (white, black, other, hispanic)
Cancer
Heart Disease
Ages 65+ (white, black, other, hispanic)
Heart Disease
Cancer

Data Elements to be Included in Forthcoming Federal County Profiles-Continued

Measures of Birth and Death
Birth Measures:
Low Birth Weight (<2500 g) (County Percent, Peer County Range, U.S. Percent, HP2010 Target)
Very Low Birth Weight (<1500 g) (County Percent, Peer County Range, U.S. Percent, HP2010 Target)
Premature Births (<37 weeks) (County Percent, Peer County Range, U.S. Percent, HP2010 Target)
Teen Mothers, <18 (County Percent, Peer County Range, U.S. Percent, HP2010 Target)
Older Mothers, 40+ (County Percent, Peer County Range, U.S. Percent, HP2010 Target)
Unmarried Mothers (County Percent, Peer County Range, U.S. Percent, HP2010 Target)
No Care in First Trimester (County Percent, Peer County Range, U.S. Percent, HP2010 Target)

Infant Mortality:
Infant Mortality (County Percent, Peer County Range, U.S. Rate, HP2010 Target)
White Non-Hispanic Infant Mortality (County Percent, Peer County Range, U.S. Rate, HP2010 Target)
Black Non-Hispanic Infant Mortality (County Percent, Peer County Range, U.S. Rate, HP2010 Target)
Hispanic Infant Mortality (County Percent, Peer County Range, U.S. Rate, HP2010 Target)
Neonatal Infant Mortality (County Percent, Peer County Range, U.S. Rate, HP2010 Target)
Post-Neonatal Infant Mortality (County Percent, Peer County Range, U.S. Rate, HP2010 Target)

Death Measures:
Breast Cancer (Female) (County Percent, Peer County Range, U.S. Rate, HP2010 Target)
Colon Cancer (County Percent, Peer County Range, U.S. Rate, HP2010 Target)
Coronary Heart Disease (County Percent, Peer County Range, U.S. Rate, HP2010 Target)
Homicide (County Percent, Peer County Range, U.S. Rate, HP2010 Target)
Lung Cancer (County Percent, Peer County Range, U.S. Rate, HP2010 Target)
Motor Vehicle Injuries (County Percent, Peer County Range, U.S. Rate, HP2010 Target)
Stroke (County Percent, Peer County Range, U.S. Rate, HP2010 Target)
Suicide (County Percent, Peer County Range, U.S. Rate, HP2010 Target)
Unintentional Injury (County Percent, Peer County Range, U.S. Rate, HP2010 Target)

Summary Measures of Health:

Life Expectancy
Range among peer counties
Median for all U.S. counties

All Causes of Death
Age adjusted rate
Range Among Peer Counties
Median For All US Counties

Self-rated Health Status
Percent of Adults who report fair to poor health
Range Among Peer Counties
Median For All US Counties

Average Number of Unhealthy Days in Past Month
Average number of unhealthy days reported in 30-day period
Range Among Peer Counties
Median For All US Counties

Vulnerable Populations:
People with No High School Diploma
Unemployed Individuals
People who are severely work disabled
Those suffering from major depression
Recent drug users

Data Elements to be Included in Forthcoming Federal County Profiles-Continued

Environmental Health:
Infectious Diseases:
E.Coli (Cases, Reported, Expected)
Salmonella (Cases, Reported, Expected)
Shigella (Cases, Reported, Expected)
Toxic Chemicals Released Annually:
National Air Quality Standards:
Carbon Monoxide
Nitrogen Dioxide
Sulfur Dioxide
Ozone
Particulate Matter
Lead

Demographic Information:

Population Size:
Population Density (people per Square Mile):
Individuals Living Below Poverty Level:
Age Distribution
- Under Age 19 Years
- 19-64 years
- Age 65-84
- Age 85+

Race/Ethnicity (Formerly -Nonwhite Population)
Black:
White
American Indian:
Asian/Pacific Islander:
Hispanic:

Risk Factors and Premature Death:
Sedentary
Few Fruits/Vegetables
Obesity
High Blood Pressure
Smoker
Diabetes

Access to Care:
All ages (Nationwide, State, County)
Under Age 18 (Nationwide, State, County)
Medicare beneficiaries
- Elderly (Age 65+)
- Disabled

Medicaid Beneficiaries
Primary Care Physicians Per 100,00 Pop.
Dentists per 100,000 Pop.
Community/Migrant Health Centers
Health Professional Shortage Area

Utilization: Right Care, Right Place, Right Time

Another issue is that we do not always get the right care at the right place at the right time.

For instance, a 2004 study* found that we only get the right care ½ of the time. The rest of the time we receive care that doesn't necessarily help us.**

Failure to get the right care at the right place at the right time exposes patients to unnecessary risks and results in higher spending.

The next few pages present charts put together by MQF and MHDO from data collected by the federal Agency for Healthcare Research and Quality (AHRQ). The charts compare Maine to the Northeast and the nation as a whole on a variety of measures.

After that are charts from MQF showing variation across Maine in the rates of a variety of procedures after adjustment for health status.

* 2004 RAND study (McGlynn): only about ½ the care we receive is care we should receive based on accepted best practices (the exact percentage depends on the health condition).
**e.g., 2006 Wennberg Study: one third of the care that seniors receive does not improve their health.

Right Care, Right Place, Right Time

The "Prevention Quality Indicators" below are calculated using hospital admissions for ambulatory care sensitive conditions that could have been avoided if treated early and appropriately out in the community.

Higher measures suggest that people are not getting the right care at the right place at the right time.

"Northeast" includes Maine, Vermont, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, and Pennsylvania.

If the comparison shows Maine is better, J is shown. If Maine is worse, L is shown. If there is no difference, K is shown.

PQI 1 - Admissions for diabetes with short-term complications per 100,000 population, age 18 years and older

PQI 1	Maine	U.S.	Maine vs. U.S.	Northeastern States	Maine vs. Northeast
2003	41.8	56.0	☺	56.0	☺
2002	41.4	54.6	☺	51.4	☺
2001	39.9	52.4	☺	48.6	☺

PQI 2 - Admissions with perforated appendix per 1000 admissions with appendicitis

PQI 2	Maine	U.S.	Maine vs. U.S.	Northeastern States	Maine vs. Northeast
2003	318.7	305.4	😐	286.8	☹
2002	311.6	302.9	😐	276.4	☹
2001	324.8	306.4	😐	290.0	☹

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PQI 3 - Admissions for diabetes with long-term complications per 100,000 population, age 18 years and older					
PQI 3	Maine	U.S.	Maine vs. U.S.	Northeastern States	Maine vs. Northeast
2003	89.0	120.7	☺	143.2	☺
2002	91.1	121.2	☺	131.2	☺
2001	104.4	117.1	☺	130.4	☺

PQI 4 - Pediatric asthma admissions per 100,000 population, age less than 18 years					
PQI 4	Maine	U.S.	Maine vs. U.S.	Northeastern States	Maine vs. Northeast
2003	135.8	216.9	☺	354.4	☺
2002	111.5	187.6	☺	212.0	☺
2001	106.2	188.6	☺	314.5	☺

PQI 5 - Admissions for chronic obstructive pulmonary disease (COPD) per 100,000 population, age 18 years and older					
PQI 5	Maine	U.S.	Maine vs. U.S.	Northeastern States	Maine vs. Northeast
2003	253.7	260.6	😐	249.1	😐
2002	265.7	273.0	😐	252.5	😐
2001	298.0	257.4	☹	238.1	☹

PQI 6 - Admissions for pediatric gastroenteritis per 100,000 population, age less than 18 years					
PQI 6	Maine	U.S.	Maine vs. U.S.	Northeastern States	Maine vs. Northeast
2003	62.6	90.8	☺	136.2	☺
2002	46.2	92.0	☺	86.8	☺
2001	57.5	106.3	☺	137.5	☺

PQI 7 - Admissions for hypertension per 100,000 population, age 18 years and older					
PQI 7	Maine	U.S.	Maine vs. U.S.	Northeastern States	Maine vs. Northeast
2003	15.3	49.9	☺	50.2	☺
2002	16.2	48.7	☺	41.8	☺
2001	18.1	45.4	☺	40.5	☺

PQI 8 - Admissions for congestive heart failure per 100,000 population, age 18 years and older					
PQI 8	Maine	U.S.	Maine vs. U.S.	Northeastern States	Maine vs. Northeast
2003	343.8	482.6	☺	508.3	☺
2002	358.2	498.2	☺	507.4	☺
2001	408.1	492.1	☺	497.9	☺

PQI 9 - Low birth weight infants per 1000 births					
PQI 9	Maine	U.S.	Maine vs. U.S.	Northeastern States	Maine vs. Northeast
2003	54.7	60.4	☺	63.2	☺
2002	54.3	59.1	☺	57.4	☺
2001	51.2	56.2	☺	56.3	☺

PQI 10 - Admissions for dehydration per 100,000 population					
PQI 10	Maine	U.S.	Maine vs. U.S.	Northeastern States	Maine vs. Northeast
2003	114.4	136.7	☺	146.2	☺
2002	131.1	149.0	☺	152.2	☺
2001	131.4	141.9	☺	142.4	😐

PQI 11 - Bacterial pneumonia admissions per 100,000 population					
PQI 11	Maine	U.S.	Maine vs. U.S.	Northeastern States	Maine vs. Northeast
2003	318.5	370.1	☺	367.9	☺
2002	310.7	376.8	☺	336.4	😐
2001	311.2	353.1	☺	324.3	😐

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PQI 12 - Admissions for urinary tract infections per 100,000 population					
PQI 12	Maine	U.S.	Maine vs. U.S.	Northeastern States	Maine vs. Northeast
2003	103.1	152.2	☺	149.2	☺
2002	103.1	148.2	☺	135.1	☺
2001	114.4	143.7	☺	134.5	☺

PQI 13 - Admissions for angina without procedure per 100,000 population, age 18 years and older					
PQI 13	Maine	U.S.	Maine vs. U.S.	Northeastern States	Maine vs. Northeast
2003	55.4	50.0	😐	54.3	😐
2002	79.0	62.5	☹	63.7	☹
2001	85.8	68.7	☹	75.9	😐

PQI 14 - Admissions for uncontrolled diabetes without complication per 100,000 population, age 18 years and older					
PQI 14	Maine	U.S.	Maine vs. U.S.	Northeastern States	Maine vs. Northeast
2003	8.8	23.8	☺	30.6	☺
2002	9.4	25.4	☺	26.5	☺
2001	10.7	26.8	☺	31.4	☺

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PQI 15 - Adult asthma admissions per 100,000 population, age 18 years and older					
PQI 15	Maine	U.S.	Maine vs. U.S.	Northeastern States	Maine vs. Northeast
2003	87.9	136.2		190.4	
2002	76.6	120.0		140.5	
2001	82.0	112.8		137.3	

PQI 15B - Asthma admissions per 100,000 population, age 65 years and older					
PQI 15B	Maine	U.S.	Maine vs. U.S.	Northeastern States	Maine vs. Northeast
2003	157.4	231.2		272.0	
2002	120.7	204.0		227.5	
2001	124.9	178.8		190.1	

PQI 16 - Lower extremity amputations among patients with diabetes per 100,000 population, age 18 years and older					
PQI 16	Maine	U.S.	Maine vs. U.S.	Northeastern States	Maine vs. Northeast
2003	29.8	38.5		43.2	
2002	32.1	39.8		43.3	
2001	41.4	38.7		41.8	

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PQI 17 - Immunization-preventable pneumococcal pneumonia admissions per 100,000 population, age 65 years and older					
PQI 17	Maine	U.S.	Maine vs. U.S.	Northeastern States	Maine vs. Northeast
2003	78.1	69.6	😐	61.5	☹
2002	104.6	76.9	☹	67.2	☹
2001	115.9	79.4	☹	66.0	☹

PQI 18 - Immunization-preventable influenza admissions per 100,000 population, age 65 years and older					
PQI 18	Maine	U.S.	Maine vs. U.S.	Northeastern States	Maine vs. Northeast
2003	51.0	68.6	☺	36.5	☹
2002	45.7	38.2	😐	28.1	☹
2001	15.1	13.4	😐	8.3	☹

Source: Agency for Healthcare Research and Quality's Healthcare Cost and Utilization Project (HCUP). State estimates are from the State Inpatient Databases (SID), and not all states participate in HCUP. Estimates for the U.S. and regions are from the Nationwide Inpatient Sample, which is drawn from the SID and weighted to give national estimates. Rates are adjusted by age and gender using the U.S. population for 2000 as the standard population. Rates generated using PQI Software Version 2.1, Revision 3, Downloaded September 2004.

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The Maine Quality Forum (MQF) uses measurement tools that are accepted by medical, business, and consumer experts to look at variation in how health care is delivered in different parts of the state This variation has implications for both the cost and the quality of care.

This chart shows hysterectomy variation as an example, but there is variation in many other procedures as well. In this example, a Skowhegan woman with fibroids is 3x more likely to receive an invasive (and expensive) hysterectomy than a woman experiencing the same symptoms in Bar Harbor. If she lives in the communities in the top of the graph (Bar Harbor, Blue Hill, etc.) she will be treated medically; if she lives in the communities in the bottom of the graph she is more likely to have a hysterectomy.

This type of "unwarranted variation" -- a term used to describe differences in health care use that are NOT explained by differences in health needs or access to health care services, as this is adjusted data -- occurs with all kinds of medical conditions, and it means that similar patients in different towns are receiving different care, even if there are no differences in health.

This variation can result in unnecessary spending – unnecessary because it does not necessarily make patients healthier – and may expose patients to unnecessary risks with varying outcomes. Less variation would suggest there is more agreement in the medical community for the best way to treat similar conditions. This would result in improved quality and reduced costs.